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In cooperation with Illinois Agricultural Experiment Station

NRCS

Natural Resources Conservation Service

Soil Survey of Carroll County, Illinois



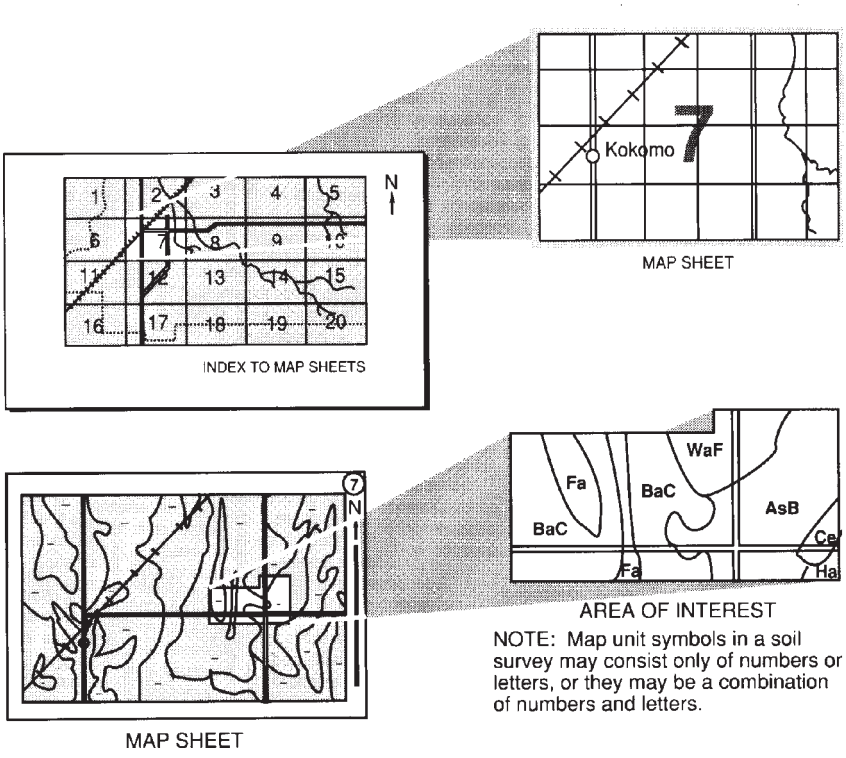
How To Use This Soil Survey

This publication consists of a manuscript and a set of soil maps. The information provided can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



NOTE: Map unit symbols in a soil survey may consist only of numbers or letters, or they may be a combination of numbers and letters.

National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the Natural Resources Conservation Service and the Illinois Agricultural Experiment Station. It is part of the technical assistance furnished to the Carroll County Soil and Water Conservation District. Additional funding was provided by the Illinois Department of Agriculture and Carroll County.

Major fieldwork for this soil survey was completed in 2004. Soil names and descriptions were approved in 2004. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2004. The most current official data are available on the Internet.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Cover Photo Caption

A limestone outcrop in a very steep area of NewGlarus and Lamoille soils overlooking the Mississippi River.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at http://www.nrcs.usda.gov.

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Foreword

Soil surveys contain information that affects land use planning in survey areas. They include predictions of soil behavior for selected land uses. The surveys highlight soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

Soil surveys are designed for many different users. Farmers, foresters, and agronomists can use the surveys to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the surveys to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the surveys to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

William J. Gradle
State Conservationist
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Soil Survey of
Carroll County, Illinois

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Carroll County is in northwestern Illinois (fig. 1). It has an area of 298,535 acres, or about 466 square miles. In 2000, the county had a population of 16,674. Mt. Carroll, the county seat, had a population of 1,832 (U.S. Department of Commerce, 2002). The county is bounded on the west by the Mississippi River, on the north by Jo Daviess and Stephenson Counties, on the east by Ogle County, and on the south by Whiteside County.

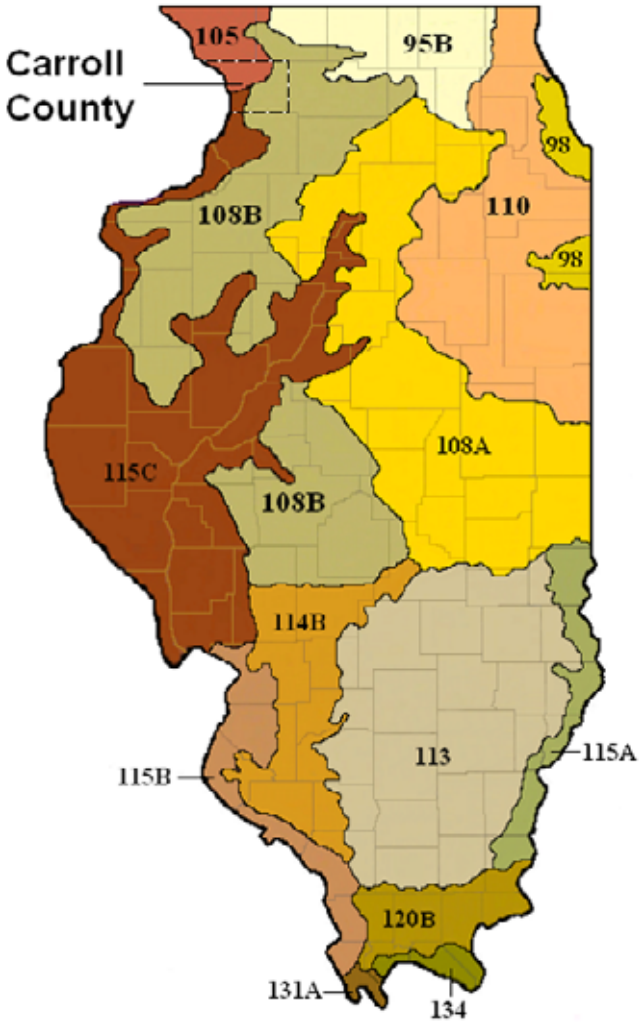
General Nature of the County

This section provides some general information about Carroll County. It describes history and settlement, agriculture, physiography and drainage, and climate.

History and Settlement

Carroll County was established by law on February 22, 1839, after having been part of Jo Daviess County since 1827. The first settlement in what is now Carroll County was at the present site of Savanna in 1828. Early trails, fords, and bridges in the county resulted primarily from travel across the area to the lead-mining activities near Galena in Jo Daviess County.

The county was named after Charles Carroll of Carrollton by early settlers from Maryland. Charles Carroll was a well known statesman of the Revolutionary period, a signer of the Declaration of Independence, and United States Senator from Maryland.



LEGEND

95B—Southern Wisconsin and Northern Illinois Drift Plain
98—Southern Michigan and Northern Indiana Drift Plain
105—Northern Mississippi Valley Loess Hills
108A and 108B—Illinois and Iowa Deep Loess and Drift
110—Northern Illinois and Indiana Heavy Till Plain
113—Central Claypan Areas
114B—Southern Illinois and Indiana Thin Loess and Till Plain, Western Part
115A, 115B, and 115C—Central Mississippi Valley Wooded Slopes
120B—Kentucky and Indiana Sandstone and Shale Hills and Valleys, Northwestern Part
131A—Southern Mississippi River Alluvium
134—Southern Mississippi Valley Loess

Figure 1.—Location of Carroll County and major land resource areas (MLRAs) in Illinois.

Agriculture

Agriculture has always been the major industry in Carroll County. The county has a high percentage of productive soils, good transportation facilities, nearby markets, and a favorable climate.

Although cash grain farming has increased, most of Carroll County is well adapted to combination grain and livestock farming because of its sloping topography, and a high percentage of farm income is derived from livestock and livestock products.

In 2002, the county had 656 farms that made up 247,536 acres (Illinois Agricultural Statistics Service, 2004). The average farm size was 377 acres. Corn, soybeans, and hay are the major crops. In 2003, about 133,000 acres was used for corn, about 56,000 acres was used for soybeans, and about 9,900 acres was used for hay (Illinois Agricultural Statistics Service, 2004).

Hogs, beef and dairy cattle, sheep, and chickens are important animal industries. In 2003, the number of hogs and pigs in the county was 38,800 and there were about 45,100 cattle and calves (Illinois Agricultural Statistics Service, 2004).

Physiography and Drainage

Most of Carroll County is in the Rock River Hill Country of the Till Plains Section of the Central Lowland Province. The northwestern one-fourth of the county, generally north of the village of Wacker and west of Illinois State Route 78, is included in the Wisconsin Driftless Section of the Central Lowland Province (Leighton and others, 1948).

The Wisconsin Driftless Section, which was unglaciated, is maturely to submaturely dissected by numerous dendritic drainage systems tributary to the Mississippi River. The Mississippi Valley has precipitous walls breaking into broad terraces and bottom land. Thick loess mantles the bluffs, except on bluff faces. The loess is thinner toward the east.

The glaciated part of the county, part of the Rock River Hill Country, has more subdued rolling hills in the stage of late youth to early maturity. The Illinoian drift thins in the area, and the uplands and valleys are determined primarily by the bedrock surface. In the southwestern part of the county, in the uplands, deposits of loess and fine sand occur on ridges and as low dunes on the eroded Illinoian till plain.

The highest point in the county, about 2 miles southeast of Shannon, has an elevation of approximately 1,070 feet. Some lowlands and islands in the Mississippi Valley are at an elevation of less than 590 feet. The normal pool level of the Mississippi River near the southwest corner of Carroll County is 583 feet (fig. 2).

The county is drained by several major streams. The Apple River, the Plum River, Rush Creek, Johnson Creek, Camp Creek, and Carroll Creek drain into the Mississippi River.

In the southeastern part of the county, Elkhorn Creek, Eagle Creek, Middle Creeks, Rock Creek, and Otter Creek drain southwestward into Whiteside County and the Rock River.

The extreme northeastern part of the county is drained by Lost Creek, which flows north through Stephenson County into Yellow Creek and eventually empties into the Pecatonica River. This water eventually reaches the Mississippi River in a circuitous route by way of the Pecatonica and Rock Rivers.

Climate

Carroll County is cold in winter. In summer it generally is hot but has occasional cool spells. Precipitation falls as snow during frequent snowstorms in winter and chiefly as rain showers, which often are heavy, during the warmer periods, when warm moist air moves in from the south. The amount of annual rainfall usually is adequate for corn, soybeans, and small grain.

Table 1 gives data on temperature and precipitation for the survey area as recorded at Mt. Carroll during the period 1971 to 2000. Table 2 shows probable dates of the first

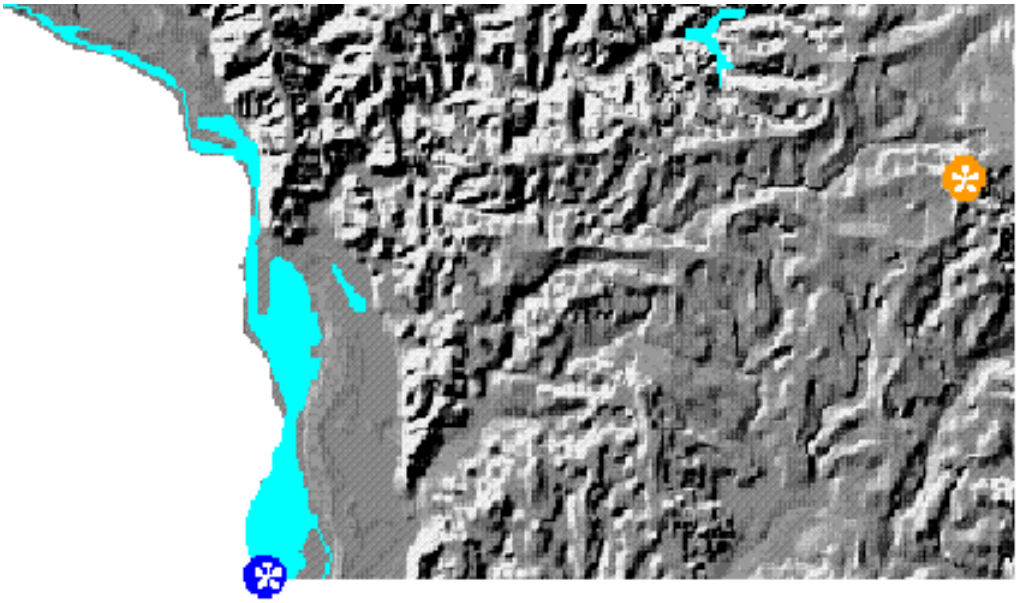


Figure 2.—A generalized relief map of Carroll County showing the highest elevation (orange dot) and lowest elevation (blue dot).

freeze in fall and the last freeze in spring. Table 3 provides data on length of the growing season.

In winter, the average temperature is about 22 degrees F and the average daily minimum temperature is about 12 degrees. The lowest temperature on record, which occurred at Mt. Carroll on January 7, 1910, is -31 degrees. In summer, the average temperature is about 69.5 degrees and the average daily maximum temperature is about 82.5 degrees. The highest recorded temperature, which occurred at Mt. Carroll on July 12, 1936, is 108 degrees.

Growing degree days are shown in table 1. They are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (50 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

Total annual precipitation is 37.48 inches. Of this total, 24.33 inches, or about 65 percent, usually falls in April through September. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall in April through September is less than 13.1 inches. The heaviest 1-day rainfall on record, 5 inches, occurred at Mt. Carroll on September 14, 1961. Thunderstorms occur on about 50 days each year, and most occur in summer.

The average seasonal snowfall is 33.4 inches. On average, 58 days of the year have at least 1 inch of snow on the ground. The number of such days, however, varies greatly from year to year.

Tornadoes and severe thunderstorms strike occasionally. They are of local extent and of short duration and cause only sparse damage in narrow belts. Hailstorms sometimes occur during the warmer periods. The hail falls in scattered small areas.

How This Survey Was Made

This survey was made to provide updated information about the soils and miscellaneous areas in the survey area, which is Major Land Resource Areas 105, 108B, and 115C (fig. 1). Major land resource areas (MLRAs) are geographically

associated land resource units that share a common land use, elevation, topography, climate, water, soils, and vegetation (USDA, 2006). Map unit design and the detailed soil descriptions are based on the occurrence of each soil throughout the MLRA. This soil survey updates a survey of Carroll County published in 1975 (Ray and others, 1975) and provides the soil information on USGS 7.5-minute Digital Ortho Quad sheets for use in future geographic information systems.

The information in this survey includes a description of the soils and miscellaneous areas and their location and a discussion of their properties and the subsequent effects on suitability, limitations, and management for specified uses.

Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; and the kinds of crops and native plants. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, soil scientists develop a concept, or model, of how the soils were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landform.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, soil reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop

yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a water table within certain depths in most years, but they cannot predict that a water table will always be at a specific level in the soil on a specific date.

The descriptions, names, and delineations of the soils in this survey area may not fully agree with those of the soils in adjacent survey areas. Differences are the result of an improved knowledge of soils, modifications in series concepts, or variations in the intensity of mapping or in the extent of the soils in the survey areas.

Formation and Classification of the Soils

This section relates the soils in the survey area to the major factors of soil formation and describes the system of soil classification.

Formation of the Soils

Soil-forming processes act on deposited or accumulated geologic material. The characteristics of the soil at any given point are determined by the parent material, living organisms both on and in the soil, the climate, the topography, and the length of time that the forces of soil formation have acted on the soil material (Jenny, 1941).

Climate and living organisms are active factors of soil formation. As they act on the parent material that has accumulated through the weathering of rocks and that may have been relocated by water, glaciers, or wind, they slowly change the material into a natural body that has genetically related horizons. The effects of climate and living organisms are conditioned by topography. The parent material affects the kind of soil profile that forms. Finally, time is needed for changing the parent material into a soil. Usually, a long time is needed for the formation of distinct horizons. The importance of each factor differs from place to place, and each modifies the effect of the other four. In some areas one factor dominates the formation of a soil. Human activities, such as clearing forests, cultivating, and applying fertilizer, also affect soil formation.

Parent Material

Parent material is the unconsolidated mass in which a soil forms. It determines the limits of chemical and mineralogical composition of the soil. The properties of the parent material vary greatly, sometimes within small areas, depending on how the material was deposited. The major parent materials in Carroll County were deposited during the glacial period, but some soils formed partially in the sedimentary bedrock, which is many thousands of years older than the glacial material.

Loess is the dominant parent material in upland areas and on some of the terraces. This silty material, deposited by wind, was blown from the flood plain along the Mississippi River. The thickness of the loess ranges from more than 30 feet on ridgetops near the Mississippi River to slightly less than 10 feet on ridgetops in the northeastern and eastern parts of the county (Reimer, 1957). The loess is less than 5 feet thick, regardless of the slope, in an upland area in the southwestern part of the county, including parts of York, Mt. Carroll, and Fairhaven Townships (Ray and Watters, 1961). Loess is an excellent parent material because of its silty texture, moderate bulk density and permeability, and well balanced mineral content (Fehrenbacher and others, 1968). Fifteen of the soil series in the county formed entirely in loess, including the Osco series, which is the most extensive soil series in Carroll County. Many of the other soils formed partly in loess that overlies other materials.

Loess is typically thin on the steeper slopes in the uplands, and in places it does not occur at all. In these steeper areas, some of the soils formed partly in loess and also in till, sand, or gravel, also of glacial origin. Where loess and other glacial deposits in upland areas are thin, the sedimentary bedrock is an important parent material. The bedrock is dominantly dolomitic limestone, but shale is important in some places and

sandstone occurs at shallow depths in a few places in the extreme eastern part of the county.

Sandy soils in the upland occur mainly in the southwestern part of the county, except for an area in northern Washington Township (T. 25 N., R. 3 E.). In some places the sandy parent material was probably blown onto the upland, but it may be the result of glacial action and melting, especially in the southwestern part of the county.

Soils that formed in stream terrace or bluff-wash parent materials occur mainly along the major streams and vary greatly in texture. Extremely sandy soils occur on much of the Mississippi River terrace along with loamy and silty soils. Lacustrine deposits, which are dominantly silty clay to clay in the upper few feet, are the parent material for a small but significant group of soils that occur mainly on the Plum River terraces north and east of Savanna.

The flood plains of the major streams contain recently deposited sediments derived from upland slopes. The soils that formed in these materials are primarily silt loams, but textures range from silty clay loam to sandy loam.

Living Organisms

Plants are the principal living organisms affecting the soils in Carroll County. Bacteria, fungi, and earthworms, however, also have affected soil formation. The chief contribution of plant and animal life is the addition of organic matter and nitrogen to the soil. The kind of organic material on and in the soil depends on the kind of plants that grew on the soil. The remains of these plants accumulate in the surface layer, decay, and eventually become organic matter. The roots of the plants provide channels for the downward movement of water through the soil and add organic material as they decay. Bacteria in the soil help to break down the organic material and thus help to provide plant nutrients.

The native vegetation in the county was trees and prairie grasses. The sloping soils formed mainly under forests of oak, hickory, and similar trees. The nearly level soils formed under prairie grasses. They have a darker and thicker surface layer than that of the soils that formed under forest vegetation. Also, they have a higher content of organic matter. Fayette soils are examples of soils that formed under forest vegetation. Muscatune soils are examples of soils that formed under prairie vegetation.

Climate

Climate is an important factor in the formation of soils. It influences the kinds of plant and animal life on and in the soil. Precipitation affects the weathering of minerals and the transporting of soil material. Temperature determines the rate of chemical reaction that occurs in the soil. The general climate has had an important overall influence on the characteristics of the soils, but it does not cause major differences among soils in a relatively small area, such as a county.

The climate in Carroll County is temperate and humid. It is probably similar to the climate under which the soils formed.

Topography

Topography, or relief, has a marked influence on the soils through its effect on natural drainage, erosion, plant cover, and soil temperature. In Carroll County, the slopes dominantly range from 0 to 60 percent. Natural soil drainage classes range from well drained on upland ridgetops to very poorly drained in depressions.

Topography influences the formation of soils by affecting runoff and drainage. Drainage in turn, through its effect on aeration of the soils, determines the color of the soil. Runoff is most rapid on the steeper slopes, but in low areas, water is temporarily

ponded. Water and air move freely through well drained soils but slowly through poorly drained soils. In well aerated soils, the iron compounds that give most soils their color are brightly colored. In poorly aerated soils, the colors are gleyed and mottled. Seaton soils are examples of well drained, well aerated soils. Sable soils are examples of poorly drained, poorly aerated soils.

Time

The length of time needed for the formation of a soil depends on the other factors of soil formation. Differences in the length of time that the parent materials have been in place are commonly reflected in the degree of profile development. Soils form more rapidly and are more acid if the parent material has a low content of calcium (lime). The more rapidly permeable soils form more readily than slowly permeable soils because calcium and other soluble minerals are leached more quickly. Soils form more quickly under forest vegetation than under prairie vegetation because grasses are more efficient in recycling calcium and other bases from the subsoil to the surface layer. Soils generally form more quickly in a humid climate than a dry climate.

The soils in Carroll County range from young to mature. Most of the soils on uplands are moderately developed.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2003). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 4 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Mollisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Aquoll (*Aqu,* meaning water, plus *oll,* from Mollisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Endoaquolls (*Endo*, meaning within, plus *aquoll*, the suborder of the Mollisols that has an aquic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other known kind of soil. Each subgroup is identified by one or more adjectives preceding the name of the great group. An example is Typic Endoaquolls.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineral content, cation-exchange capacity, temperature regime, thickness of the root

zone, consistence, moisture equivalent, slope, and permanent cracks. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-silty, mixed, superactive, mesic Typic Endoaquolls.

SERIES. The series consists of soils that have similar horizons in their profile. The horizons are similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. The texture of the surface layer or of the substratum can differ within a series.

Soil Series and Detailed Soil Map Units

In this section, arranged in alphabetical order, each soil series recognized in the survey area is described. Each series description is followed by descriptions of the associated detailed soil map units.

Characteristics of the soil and the material in which it formed are identified for each soil series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the "Soil Survey Manual" (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in "Soil Taxonomy" (Soil Survey Staff, 1999) and in "Keys to Soil Taxonomy" (Soil Survey Staff, 2003). Unless otherwise stated, colors in the descriptions are for moist soil. Following the pedon description is the range of important characteristics of the soils in the series.

The map units on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses. More information about each map unit is given under the headings "Use and Management of the Soils" and "Soil Properties."

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of

such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Fayette silt loam, 5 to 10 percent slopes, eroded, is a phase of the Fayette series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are called complexes. A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. NewGlarus-Palsgrove silt loams, 10 to 18 percent slopes, eroded, is an example.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Pits, gravel, is an example.

Table 5 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

Ade Series

Taxonomic classification: Coarse-loamy, mixed, superactive, mesic Lamellic Argiudolls

Typical Pedon

Ade loamy fine sand, 2 to 7 percent slopes; 1,820 feet east and 105 feet north of the southwest corner of sec. 15, T. 20 N., R. 4 E.; Whiteside County, Illinois; USGS Erie topographic quadrangle; lat. 41 degrees 42 minutes 52 seconds N. and long. 90 degrees 01 minute 43 seconds W., NAD 27:

Ap—0 to 10 inches; very dark grayish brown (10YR 3/2) loamy fine sand, grayish brown (10YR 5/2) dry; moderate medium granular structure; friable; moderately acid; abrupt smooth boundary.

BA—10 to 16 inches; brown (10YR 4/3) loamy fine sand; weak medium subangular blocky structure; friable; many faint very dark grayish brown (10YR 3/2) organic films on faces of peds; slightly acid; clear smooth boundary.

Bw—16 to 27 inches; dark yellowish brown (10YR 4/4) loamy fine sand; weak medium subangular blocky structure; friable; slightly acid; abrupt smooth boundary.

E and Bt1—27 to 41 inches; dark yellowish brown (10YR 4/4) fine sand (E); single grain; loose; lamellae of brown (7.5YR 4/4) loam (Bt) about 6 inches apart and 4 to 5 inches thick; moderate medium subangular blocky structure; friable; slightly acid; clear smooth boundary.

E and Bt2—41 to 60 inches; yellowish brown (10YR 5/4) fine sand (E); single grain; loose; lamellae of brown (7.5YR 4/4) sandy loam and loamy sand (Bt) about 5 inches apart and 1 to 3 inches thick; weak medium subangular blocky structure; friable; slightly acid.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches
Depth to lamellae: 30 to 45 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 to 3
Texture—loamy fine sand, loamy sand, or fine sand

Bw horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 6
Texture—loamy fine sand or fine sand

E part of the E and Bt horizon:
Hue—10YR
Value—4 to 6
Chroma—3 to 6
Texture—sand or fine sand

Bt part of the E and Bt horizon:
Hue—7.5YR or 10YR
Value—3 or 4
Chroma—3 or 4
Texture—loamy sand, sandy loam, or loam

98A—Ade loamy fine sand, 0 to 2 percent slopes

Setting

Landform: Stream terraces
Position on the landform: Shoulders

Map Unit Composition

Ade and similar soils: 96 percent
Dissimilar soils: 4 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have silt loam in the lower part of the subsoil
- Soils that are mostly fine sand throughout

Dissimilar soils:
- The somewhat poorly drained Watseka soils in low areas

Properties and Qualities of the Ade Soil

Parent material: Eolian sands
Drainage class: Somewhat excessively drained
Slowest permeability within a depth of 40 inches: Rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 4.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent

Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: High

Interpretive Groups

Land capability classification: 3s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

98B—Ade loamy fine sand, 2 to 7 percent slopes

Setting

Landform: Stream terraces
Position on the landform: Shoulders

Map Unit Composition

Ade and similar soils: 96 percent
Dissimilar soils: 4 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have silt loam in the lower part of the subsoil
- Soils that are mostly fine sand throughout

Dissimilar soils:
- Soils that have a seasonal high water table at a depth of 1 to 2 feet; in low areas
- The somewhat poorly drained Watseka soils in low areas

Properties and Qualities of the Ade Soil

Parent material: Eolian sands
Drainage class: Somewhat excessively drained
Slowest permeability within a depth of 40 inches: Rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 4.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: High

Interpretive Groups

Land capability classification: 3s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

98D—Ade loamy fine sand, 7 to 15 percent slopes

Setting

Landform: Dunes
Position on the landform: Shoulders

Map Unit Composition

Ade and similar soils: 96 percent
Dissimilar soils: 4 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have silt loam in the lower part of the subsoil
- Soils that are mostly fine sand throughout

Dissimilar soils:
- The somewhat poorly drained Watseka soils in low areas

Properties and Qualities of the Ade Soil

Parent material: Eolian sands
Drainage class: Somewhat excessively drained
Slowest permeability within a depth of 40 inches: Rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 4.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: High

Interpretive Groups

Land capability classification: 3s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Argyle Series

Taxonomic classification: Fine-loamy, mixed, superactive, mesic Mollic Hapludalfs

Typical Pedon

Argyle silt loam, 5 to 10 percent slopes, eroded; 2,200 feet south and 1,300 feet east of the northwest corner of sec. 4, T. 25 N., R. 7 E.; Carroll County, Illinois; USGS Shannon topographic quadrangle; lat. 42 degrees 11 minutes 34 seconds N. and long. 89 degrees 42 minutes 11 seconds W., NAD 27:

Ap—0 to 7 inches; black (10YR 2/1) silt loam; moderate fine and medium granular structure; friable; many fine and medium roots; moderately acid; clear smooth boundary.

BE—7 to 12 inches; yellowish brown (10YR 5/4) silty clay loam; moderate fine and medium subangular blocky structure; firm; common fine and medium roots; very

dark gray (10YR 3/1) worm channels; light gray (10YR 7/1) silt coatings on faces of peds; moderately acid; clear smooth boundary.

Bt1—12 to 22 inches; yellowish brown (10YR 5/4) silty clay loam; strong fine and medium subangular blocky structure; firm; common fine roots; common distinct dark yellowish brown (10YR 4/4) clay films on faces of peds; strongly acid; abrupt smooth boundary.

2Bt2—22 to 38 inches; red (2.5YR 4/6) gravelly clay loam; moderate medium and coarse angular blocky structure; firm; few fine roots; common faint yellowish red (5YR 4/6) clay films, especially on pebbles; common fine black (N 2/) masses of iron and manganese oxides or organic coatings; stone line in the upper part of the horizon; 25 percent gravel; strongly acid; clear smooth boundary.

2Bt3—38 to 70 inches; red (2.5YR 4/6) gravelly sandy clay loam; moderate coarse angular blocky structure; firm; few fine roots; common distinct dark reddish brown (2.5YR 3/4) clay films on faces of peds; 20 percent gravel; strongly acid; clear smooth boundary.

2BC—70 to 84 inches; dark red (2.5YR 3/6) sandy loam; weak coarse angular blocky structure; friable; 5 percent gravel; slightly acid.

Range in Characteristics

Thickness of the loess: 15 to 25 inches
Thickness of the solum: 48 to more than 96 inches

A or Ap horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—silt loam

E horizon:
Hue—10YR
Value—4 to 6
Chroma—2 or 3
Texture—silt loam

BE or Bt horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—4 to 6
Texture—silty clay loam

2Bt horizon:
Hue—7.5YR or 2.5YR
Value—3 to 5
Chroma—4 to 6
Texture—clay loam to gravelly sandy clay loam or sandy loam

227B—Argyle silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits and shoulders

Map Unit Composition

Argyle and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches or more than 40 inches of loess over the underlying till
- Soils that have a lighter colored surface layer

Properties and Qualities of the Argyle Soil

Parent material: Thin layer of loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 4.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

227C2—Argyle silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Shoulders and backslopes

Map Unit Composition

Argyle and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches or more than 40 inches of loess over the underlying till
- Soils that have a lighter colored surface layer

Properties and Qualities of the Argyle Soil

Parent material: Thin layer of loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None

Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Ashdale Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Argiudolls
Taxadjunct features: The Ashdale soil in map unit 411C2 has a thinner dark surface layer than is defined as the range for the series. This soil is classified as a fine-silty, mixed, superactive, mesic Mollic Hapludalf.

Typical Pedon

Ashdale silt loam, 2 to 5 percent slopes; 18 feet east and 660 feet south of the center of sec. 36, T. 22 N., R. 11 E.; Lee County, Illinois; USGS Ashton topographic quadrangle; lat. 41 degrees 51 minutes 04 seconds N. and long. 89 degrees 10 minutes 43 seconds W., NAD 27:

Ap—0 to 9 inches; very dark gray (10YR 3/1) silt loam, grayish brown (10YR 5/2) dry; moderate fine granular structure; friable; few fine roots throughout; slightly acid; abrupt smooth boundary.
AB—9 to 13 inches; dark brown (10YR 3/3) silt loam, brown (10YR 5/3) dry; weak fine subangular blocky structure parting to moderate fine granular; friable; few fine roots throughout; common distinct very dark gray (10YR 3/1) organic coatings on faces of peds; moderately acid; clear smooth boundary.
Bt1—13 to 19 inches; dark yellowish brown (10YR 4/4) silty clay loam; weak medium prismatic structure parting to moderate fine granular; friable; few fine roots between peds; common faint very dark grayish brown (10YR 3/2) clay films on faces of peds; moderately acid; clear smooth boundary.
Bt2—19 to 26 inches; dark yellowish brown (10YR 4/4) silty clay loam; weak fine prismatic structure parting to moderate medium subangular blocky; firm; few fine roots between peds; common faint brown (10YR 4/3) clay films on faces of peds; moderately acid; clear smooth boundary.
Bt3—26 to 35 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate fine prismatic structure parting to moderate fine subangular blocky; firm; few fine roots between peds; few faint brown (10YR 4/3) clay films on faces of peds; few distinct light brownish gray (10YR 6/2) (dry) silt coatings on faces of peds; slightly acid; clear smooth boundary.
Bt4—35 to 44 inches; dark yellowish brown (10YR 4/4) silt loam; moderate medium prismatic structure parting to moderate medium subangular blocky; firm; few fine roots between peds; few faint brown (10YR 4/3) clay films on faces of peds; few distinct light brownish gray (10YR 6/2) (dry) silt coatings on faces of peds; slightly acid; clear smooth boundary.
Bt5—44 to 48 inches; dark yellowish brown (10YR 4/4) silt loam; moderate medium subangular blocky structure; firm; few fine roots between peds; few faint brown

(10YR 4/3) clay films on faces of peds; 1 percent pebbles about 1 to 5 mm in size; neutral; clear smooth boundary.
2BC—48 to 52 inches; mixed yellowish red (5YR 4/6) and dark yellowish brown (10YR 4/4) silty clay; moderate fine subangular blocky structure; firm; few fine roots between peds; neutral; clear smooth boundary.
2R—52 inches; mixed brownish yellow (10YR 6/6) and reddish brown (5YR 4/4), fractured limestone bedrock.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches
Thickness of the loess: 36 to 50 inches
Thickness of the residuum: 2 to 20 inches
Thickness of the solum: 40 to 60 inches

Ap or AB horizon:
Hue—10YR
Value—2 or 3
Chroma—1 to 3
Texture—silt loam

Bt horizon:
Hue—10YR
Value—4 or 5
Chroma—3 to 5
Texture—silty clay loam or silt loam

2BC horizon:
Hue—5YR to 10YR
Value—3 to 5
Chroma—3 to 6
Texture—silty clay or clay

411B—Ashdale silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders and summits

Map Unit Composition

Ashdale and similar soils: 85 percent
Dissimilar soils: 15 percent

Minor Components

Similar soils:
- Soils that have a thinner dark surface layer
- Soils that contain more sand in the surface layer and the upper part of the subsoil
- Soils that have fractured limestone bedrock within a depth of 40 inches
- Soils that have thin sandy subhorizons in the lower part of the subsoil

Dissimilar soils:
- The well drained Ogle soils in landform positions similar to those of the Ashdale soil

Properties and Qualities of the Ashdale Soil

Parent material: Loess over residuum weathered from limestone
Drainage class: Well drained

Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 10.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 5.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

411C2—Ashdale silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes and shoulders

Map Unit Composition

Ashdale and similar soils: 85 percent
Dissimilar soils: 15 percent

Minor Components

Similar soils:
- Soils that have a thinner dark surface layer
- Soils that contain more sand in the surface layer and the upper part of the subsoil
- Soils that have fractured limestone bedrock within a depth of 40 inches
- Soils that have thin sandy subhorizons in the lower part of the subsoil

Dissimilar soils:
- The well drained Ogle soils in landform positions similar to those of the Ashdale soil

Properties and Qualities of the Ashdale Soil

Parent material: Loess over residuum weathered from limestone
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 11.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 5.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium

Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Atterberry Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Udollic Endoaqualfs

Typical Pedon

Atterberry silt loam, 0 to 2 percent slopes; 1,650 feet north and 1,120 feet east of the southwest corner of sec. 34, T. 16 N., R. 9 E.; Bureau County, Illinois; USGS Princeton South topographic quadrangle; lat. 41 degrees 19 minutes 30 seconds N. and long. 89 degrees 26 minutes 47 seconds W., NAD 27:

Ap—0 to 9 inches; very dark grayish brown (10YR 3/2) silt loam, brown (10YR 5/3) dry; moderate fine granular structure; friable; few fine roots; neutral; abrupt smooth boundary.

E—9 to 13 inches; light brownish gray (10YR 6/2) silt loam, light brownish gray (10YR 7/2) dry; moderate thin platy structure; friable; few fine roots; common fine faint grayish brown (10YR 5/2) silt coatings; slightly acid; clear smooth boundary.

BE—13 to 17 inches; brown (10YR 5/3) silt loam; moderate medium platy structure parting to moderate very fine subangular blocky; friable; few fine roots; common faint brown (10YR 4/3) clay films on faces of peds and common distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; few fine prominent dark brown (7.5YR 3/2) concretions of iron and manganese oxide; few fine distinct grayish brown (10YR 5/2) iron depletions in the matrix; slightly acid; clear smooth boundary.

Bt—17 to 24 inches; brown (10YR 5/3) silty clay loam; moderate fine subangular blocky structure; firm; few fine roots; many faint dark grayish brown (10YR 4/2) clay films and common faint light gray (10YR 7/2) (dry) silt coatings on faces of peds; common fine prominent rounded dark brown (7.5YR 3/2) concretions of iron and manganese oxide; common fine faint grayish brown (10YR 5/2) iron depletions and common fine distinct yellowish brown (10YR 5/6) iron concentrations in the matrix; strongly acid; clear smooth boundary.

Btg1—24 to 33 inches; grayish brown (2.5Y 5/2) silty clay loam; moderate medium subangular blocky structure; friable; few fine roots; many distinct grayish brown (10YR 5/2) clay films and few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; common fine prominent rounded dark brown (7.5YR 3/2) concretions of iron and manganese oxide; common fine faint light brownish gray (2.5Y 6/2) iron depletions and common fine distinct yellowish brown (10YR 5/6) iron concentrations in the matrix; strongly acid; clear smooth boundary.

Btg2—33 to 40 inches; light brownish gray (2.5Y 6/2) silty clay loam; moderate medium prismatic structure parting to moderate medium subangular blocky; friable; few fine roots; common distinct grayish brown (10YR 5/2) clay films and few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; many prominent very dark grayish brown (10YR 3/2) clay films lining pores; common fine prominent rounded dark brown (7.5YR 3/2) concretions of iron and manganese oxide; many fine prominent yellowish brown (10YR 5/6) iron concentrations in the matrix; strongly acid; clear smooth boundary.

Btg3—40 to 48 inches; light brownish gray (2.5Y 6/2) silty clay loam; moderate coarse prismatic structure; friable; few fine roots; common distinct grayish brown (10YR 5/2) clay films on faces of peds; many prominent very dark grayish brown (10YR 3/2) clay films lining pores; many fine prominent yellowish brown (10YR 5/6) iron concentrations in the matrix; strongly acid; clear smooth boundary.

BCg—48 to 55 inches; light brownish gray (2.5Y 6/2) silt loam; weak coarse prismatic structure; friable; common distinct grayish brown (10YR 5/2) clay films on faces of peds; many prominent very dark grayish brown (10YR 3/2) clay films lining pores; many medium prominent yellowish brown (10YR 5/6) iron concentrations in the matrix; moderately acid; clear wavy boundary.

Cg—55 to 60 inches; light brownish gray (2.5Y 6/2) silt loam; massive; friable; many medium prominent yellowish brown (10YR 5/6) iron concentrations in the matrix; slightly acid.

Range in Characteristics

Thickness of the solum: 42 to 72 inches

Ap or A horizon:
Value—2 or 3
Chroma—1 or 2
Reaction—moderately acid to neutral

E horizon:
Value—4 to 6
Chroma—1 or 2
Reaction—strongly acid to neutral

Bt or Btg horizon:
Hue—10YR, 2.5Y, or 5Y
Value—4 to 6
Chroma—2 to 4
Texture—silty clay loam or silt loam
Reaction—strongly acid to neutral

C or Cg horizon:
Hue—10YR, 2.5Y, or 5Y
Value—4 to 6
Chroma—1 to 4
Reaction—moderately acid to slightly alkaline

61A—Atterberry silt loam, 0 to 2 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits

Map Unit Composition

Atterberry and similar soils: 98 percent
Dissimilar soils: 2 percent

Minor Components

Similar soils:
- Soils that have less clay in the subsoil
- Soils that have a lighter colored surface horizon

- Soils that have a dark surface layer more than 10 inches thick
- Soils that do not have a seasonal high water table within a depth of 3 feet

Dissimilar soils:
- The poorly drained Sable soils in low areas that are subject to ponding

Properties and Qualities of the Atterberry Soil

Parent material: Loess
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.5 to 3.5 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 0.5 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland where drained
Hydric soil status: Not hydric

61B—Atterberry silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits

Map Unit Composition

Atterberry and similar soils: 98 percent
Dissimilar soils: 2 percent

Minor Components

Similar soils:
- Soils that have less clay in the subsoil
- Soils that have a lighter colored surface horizon
- Soils that have a dark surface layer more than 10 inches thick
- Soils that do not have a seasonal high water table within a depth of 3 feet

Dissimilar soils:
- The poorly drained Sable soils in low areas that are subject to ponding

Properties and Qualities of the Atterberry Soil

Parent material: Loess
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate

Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.5 to 3.5 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 0.5 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Beavercreek Series

Taxonomic classification: Loamy-skeletal, mixed, active, calcareous, mesic Typic Udifluvents
Taxadjunct features: The Beavercreek soils in this survey area have a water table higher in the profile than is defined as the range for the series. Also, they are calcareous throughout.

Typical Pedon

Beavercreek silt loam, 0 to 2 percent slopes, frequently flooded, 1,500 feet west and 370 feet south of the northeast corner of sec. 7, T. 26 N., R. 5 E.; Jo Daviess County, Illinois; USGS Kent topographic quadrangle; lat. 42 degrees 16 minutes 05 seconds N. and long. 89 degrees 57 minutes 54 seconds W., NAD 27:

A—0 to 4 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; moderate fine granular structure; friable; many very fine roots; many distinct very dark gray (10YR 3/1) organic coatings on faces of peds; less than 1 percent chert fragments of gravel size; slightly effervescent; slightly alkaline; abrupt smooth boundary.
C1—4 to 7 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; massive; friable; many very fine roots; common distinct brown (10YR 4/3 and 5/3) depositional strata; many distinct very dark gray (10YR 3/1) organic coatings on faces of peds; less than 1 percent chert fragments of gravel size; slightly effervescent; slightly alkaline; abrupt smooth boundary.
C2—7 to 18 inches; brown (10YR 5/3) silt loam; massive; friable; few very fine roots; very dark gray (10YR 3/1) loam depositional strata; 20 percent chert and dolomite fragments of gravel size; slightly effervescent; slightly alkaline; abrupt smooth boundary.
2C3—18 to 32 inches; dark grayish brown (10YR 4/2) extremely gravelly loam; massive; friable; few very fine roots; common distinct very dark gray (10YR 3/1) organic films; 70 percent chert and dolomite fragments of gravel size; strongly effervescent; slightly alkaline; abrupt smooth boundary.
2C4—32 to 52 inches; dark grayish brown (10YR 4/2) very gravelly loam with depositional strata of coarse sand; massive; friable; common distinct very dark grayish brown (10YR 3/2) and very dark gray (10YR 3/1) organic coatings on

faces of peds; 50 percent chert fragments of gravel size; violently effervescent; moderately alkaline; clear smooth boundary.

2Ab—52 to 57 inches; very dark gray (2.5Y 3/1) gravelly silt loam; few fine prominent light olive brown (2.5Y 5/6) mottles; weak medium and fine subangular blocky structure; friable; 30 percent chert and dolomite fragments of gravel size; light olive brown (2.5Y 5/6) and olive yellow (2.5Y 6/6) weathered rock fragments; slightly effervescent; neutral; abrupt smooth boundary.

2Bg—57 to 60 inches; dark grayish brown (2.5Y 4/2) very gravelly loam; common medium prominent yellowish brown (10YR 5/6) mottles; weak medium subangular blocky structure; friable; 70 percent chert and dolomite fragments of gravel size; common distinct very dark gray (2.5Y 3/1) organic coatings on faces of peds; strongly effervescent; slightly alkaline.

Range in Characteristics

Depth to carbonates: 0 to 10 inches

A and C horizons:
- Hue—10YR
- Value—3 to 6
- Chroma—2 or 3
- Texture—fine sandy loam, very fine sandy loam, loam, or silt loam

2C horizon:
- Hue—10YR or 2.5Y
- Value—3 to 6
- Chroma—2 to 4
- Texture—sand, loamy sand, sandy loam, loam, or silt loam or the gravelly or very gravelly analogs of these textures

2Ab horizon:
- Hue—5Y, 2.5Y, or N
- Value—2 or 3
- Chroma—0 or 1
- Texture—silty clay loam, loam, or silt loam or the gravelly or very gravelly analogs of these textures

2Bb horizon:
- Hue—10YR or 2.5Y
- Value—3 to 6
- Chroma—2 to 4
- Texture—silty clay loam, loam, or silt loam or the gravelly or very gravelly analogs of these textures

3579A—Beavercreek silt loam, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Beavercreek and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have more clay in the surface layer and subsoil
- Soils that have a surface layer more than 24 inches thick

Dissimilar soils:
- Somewhat poorly drained soils in the slightly lower positions

Properties and Qualities of the Beavercreek Soil

Parent material: Gravelly and cobbly loamy recent alluvial and colluvial sediments
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 5.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: Low
Frequency and most likely period of flooding: Frequent (January, February, March, April, May, June, November, December)
Potential for frost action: Low
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Camden Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Camden silt loam, 0 to 2 percent slopes; 1,280 feet west and 1,740 feet south of the northeast corner of sec. 12, T. 15 N., R. 8 E.; Bureau County, Illinois; USGS Wyanet topographic quadrangle; lat. 41 degrees 18 minutes 05 seconds N. and long. 89 degrees 30 minutes 52 seconds W., NAD 27:

Ap—0 to 7 inches; brown (10YR 4/3) silt loam, pale brown (10YR 6/3) dry; moderate fine granular structure; friable; few fine roots; slightly acid; abrupt smooth boundary.

E—7 to 12 inches; yellowish brown (10YR 5/4) silt loam; weak medium platy structure parting to weak very fine subangular blocky; friable; few fine roots; neutral; clear smooth boundary.

Bt1—12 to 18 inches; yellowish brown (10YR 5/6) silty clay loam; moderate fine subangular blocky structure; friable; few fine roots; common distinct yellowish brown (10YR 5/4) clay films on faces of peds; neutral; clear smooth boundary.

Bt2—18 to 26 inches; yellowish brown (10YR 5/6) silty clay loam; moderate medium prismatic structure parting to moderate medium subangular blocky; friable; few fine

roots; many distinct dark yellowish brown (10YR 4/4) clay films on faces of peds; moderately acid; clear smooth boundary.

2Bt3—26 to 34 inches; yellowish brown (10YR 5/6) clay loam; weak medium prismatic structure parting to moderate medium subangular blocky; friable; few fine roots; many distinct dark yellowish brown (10YR 4/4) clay films on faces of peds; moderately acid; clear smooth boundary.

2Bt4—34 to 37 inches; strong brown (7.5YR 5/6) clay loam; weak medium subangular blocky structure; friable; few fine roots; many distinct brown (7.5YR 4/4) clay films on faces of peds; about 7 percent gravel; slightly acid; clear smooth boundary.

2Bt5—37 to 48 inches; strong brown (7.5YR 5/6) sandy clay loam; 1-inch strata of yellowish brown (10YR 5/6) sandy loam; weak medium subangular blocky structure; friable; common distinct brown (7.5YR 4/4) clay films on faces of peds; about 5 percent gravel; slightly acid; clear smooth boundary.

2Bt6—48 to 53 inches; strong brown (7.5YR 5/6) sandy loam; weak medium subangular blocky structure; friable; common distinct brown (7.5YR 4/4) clay films bridging sand grains; about 2 percent gravel; neutral; clear wavy boundary.

2C—53 to 60 inches; brown (7.5YR 4/4) sandy loam that has thin strata of loamy sand; massive; friable; about 5 percent gravel; neutral.

Range in Characteristics

Depth to the base of the argillic horizon: 35 to 60 inches

Ap horizon:
- Hue—10YR
- Value—3 to 5
- Chroma—2 or 3
- Texture—silt loam

E horizon:
- Hue—10YR
- Value—4 to 6
- Chroma—2 to 4
- Texture—silt loam

Bt horizon:
- Hue—7.5YR or 10YR
- Value—4 to 6
- Chroma—3 to 6
- Texture—silty clay loam or silt loam

2Bt horizon:
- Hue—7.5YR, 10YR, or 2.5Y
- Value—4 to 6
- Value—3 to 6
- Texture—silty clay loam, loam, clay loam, sandy loam, sandy clay loam, or silt loam

2C horizon:
- Hue—7.5YR or 10YR
- Value—4 to 6
- Chroma—3 to 6
- Texture—stratified sandy loam, loam, or silt loam with thin strata of other textures

134A—Camden silt loam, 0 to 2 percent slopes

Setting

Landform: Outwash plains
Position on the landform: Summits

Map Unit Composition

Camden and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer

Properties and Qualities of the Camden Soil

Parent material: Loess over outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate or moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

134B—Camden silt loam, 2 to 5 percent slopes

Setting

Landform: Stream terraces and outwash plains
Position on the landform: Backslopes and shoulders

Map Unit Composition

Camden and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have more than 40 inches of loess over outwash
- Soils that have a water table within a depth of 60 inches

Properties and Qualities of the Camden Soil

Parent material: Loess over outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate

Permeability below a depth of 60 inches: Moderate or moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

134C2—Camden silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Stream terraces and outwash plains
Position on the landform: Shoulders and backslopes

Map Unit Composition

Camden and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have less than 20 inches or more than 40 inches of loess over outwash

Properties and Qualities of the Camden Soil

Parent material: Loess over outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.5 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Casco Series

Taxonomic classification: Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Inceptic Hapludalfs

Typical Pedon

Casco loam, in an area of Hennepin-Casco complex, 25 to 60 percent slopes; 40 feet south and 54 feet west of the northeast corner of sec. 10, T. 15 N., R. 8 E.; Bureau County, Illinois; USGS Wyanet topographic quadrangle; lat. 41 degrees 18 minutes 22 seconds N. and long. 89 degrees 32 minutes 59 seconds W., NAD 27:

A—0 to 6 inches; very dark grayish brown (10YR 3/2) loam, brown (10YR 5/3) dry; moderate medium subangular blocky structure; friable; many fine roots; slightly acid; clear smooth boundary.

Bt1—6 to 13 inches; brown (10YR 4/3) loam; moderate fine and very fine subangular blocky structure; friable; many fine roots; few faint dark brown (10YR 3/3) clay films on faces of peds; neutral; clear smooth boundary.

2Bt2—13 to 17 inches; brown (7.5YR 4/4) gravelly clay loam; moderate medium subangular blocky structure; friable; common fine roots; common faint dark brown (7.5YR 3/4) clay films on faces of peds; 20 percent gravel; neutral; clear smooth boundary.

2BC—17 to 24 inches; dark yellowish brown (10YR 4/4) very gravelly sandy clay loam; weak fine subangular blocky structure; very friable; few fine roots; neutral; 40 percent gravel; abrupt smooth boundary.

2C—24 to 60 inches; yellowish brown (10YR 5/4) sand and gravel; single grain; loose; about 25 percent gravel as an average; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to sandy and gravelly deposits: 10 to 20 inches
Depth to carbonates: 10 to 20 inches
Thickness of the solum: 10 to 20 inches

A horizon:
- Hue—7.5YR or 10YR
- Value—3 or 4
- Chroma—2 or 3
- Texture—loam or clay loam

Bt or 2Bt horizon:
- Hue—5YR, 7.5YR, or 10YR
- Value—4 or 5
- Chroma—3 or 4
- Texture—clay loam, sandy clay loam, or loam or the gravelly analogs of these textures
- Content of gravel—0 to 35 percent

2C horizon:
- Hue—7.5YR or 10YR
- Value—4 to 7
- Chroma—3 or 4
- Texture—the gravelly, very gravelly, or extremely gravelly analogs of sand or coarse sand
- Content of gravel—15 to 70 percent

735D2—Casco-Rodman-Fox complex, 6 to 12 percent slopes, eroded

Setting

Landform: Stream terraces
Position on the landform: Backslopes

Map Unit Composition

Casco and similar soils: 35 percent
Rodman and similar soils: 31 percent
Fox and similar soils: 29 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less gravel and more sand or silt in the lower layers

Dissimilar soils:
- Soils underlain by till or limestone bedrock

Properties and Qualities of the Casco Soil

Parent material: Loamy alluvium over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 3.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Rodman Soil

Parent material: Sandy and gravelly glaciofluvial deposits
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 2.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Ponding: None
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low

Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Properties and Qualities of the Fox Soil

Parent material: Loamy alluvium and/or thin layer of loess over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Casco—4e; Rodman—4s; Fox—3e
Prime farmland category: Not prime farmland
Hydric soil status: Casco—not hydric; Rodman—not hydric; Fox—not hydric

735E2—Casco-Rodman-Fox complex, 12 to 20 percent slopes, eroded

Setting

Landform: Stream terraces
Position on the landform: Backslopes

Map Unit Composition

Casco and similar soils: 35 percent
Rodman and similar soils: 31 percent
Fox and similar soils: 29 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less gravel and more sand or silt in the lower layers

Dissimilar soils:
- Soils underlain by till or limestone bedrock

Properties and Qualities of the Casco Soil

Parent material: Loamy alluvium over calcareous, stratified sandy outwash
Drainage class: Well drained

Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 3.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Rodman Soil

Parent material: Sandy and gravelly glaciofluvial deposits
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 2.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Ponding: None
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Properties and Qualities of the Fox Soil

Parent material: Loamy alluvium and/or thin layer of loess over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Casco—6e; Rodman—6s; Fox—4e
Prime farmland category: Not prime farmland
Hydric soil status: Casco—not hydric; Rodman—not hydric; Fox—not hydric

Coatsburg Series

Taxonomic classification: Fine, smectitic, mesic Vertic Argiaquolls
Taxadjunct features: The Coatsburg soil in map unit 660D3 has a thinner dark surface layer than is defined as the range for the series. This soil is classified as a fine, smectitic, mesic Vertic Epiaqualf.

Typical Pedon

Coatsburg silt loam, 5 to 10 percent slopes, eroded; 2,550 feet east and 2,400 feet north of the southwest corner of sec. 20, T. 2 N., R. 5 W.; Adams County, Illinois; USGS Augusta topographic quadrangle; lat. 40 degrees 08 minutes 31 seconds N. and long. 90 degrees 59 minutes 59 seconds W., NAD 27:

Ap—0 to 6 inches; very dark gray (10YR 3/1) silt loam, dark grayish brown (10YR 4/2) dry; moderate fine granular structure; friable; many fine and medium roots; moderately acid; abrupt smooth boundary.

AB—6 to 10 inches; very dark gray (10YR 3/1) silty clay loam, gray (10YR 5/1) dry; weak medium subangular blocky structure parting to moderate fine subangular blocky; firm; common fine roots; few prominent light gray (10YR 7/1) (dry) silt coatings on faces of peds; common fine prominent irregular strong brown (7.5YR 5/6) masses of iron oxide throughout; many fine prominent irregular light olive brown (2.5Y 5/4) masses of iron oxide throughout; moderately acid; clear wavy boundary.

2Btg1—10 to 14 inches; dark grayish brown (10YR 4/2) silty clay loam; weak medium subangular blocky structure; firm; few fine roots; common distinct very dark gray (10YR 3/1) organo-clay films on faces of peds; common distinct dark gray (10YR 4/1) clay films on faces of peds; common fine prominent irregular strong brown (7.5YR 5/6) and many fine prominent irregular light olive brown (2.5Y 5/4) masses of iron oxide throughout; moderately acid; clear wavy boundary.

2Btg2—14 to 19 inches; grayish brown (10YR 5/2) silty clay; weak coarse prismatic structure parting to weak medium subangular blocky; firm; few fine and medium roots; common distinct very dark gray (10YR 3/1) organo-clay films on faces of peds; many fine prominent irregular strong brown (7.5YR 5/6) masses of iron oxide throughout; common fine faint irregular light brownish gray (10YR 6/2) iron depletions throughout; moderately acid; clear wavy boundary.

2Btg3—19 to 26 inches; grayish brown (10YR 5/2) silty clay loam; weak very coarse prismatic structure; firm; few fine roots; few distinct very dark gray (10YR 3/1) organo-clay films on faces of peds; common distinct gray (10YR 5/1) clay films on faces of peds; common fine and medium prominent irregular strong brown (7.5YR 5/6) masses of iron oxide throughout; many fine faint irregular light brownish gray (10YR 6/2) iron depletions throughout; moderately acid; clear wavy boundary.

2Btg4—26 to 38 inches; grayish brown (10YR 5/2) silty clay loam; weak very coarse prismatic structure; firm; few very fine roots; few distinct gray (10YR 5/1) clay films on faces of peds and in pores; common fine and medium prominent irregular black (2.5Y 2.5/1) masses of iron and manganese oxide throughout; common fine and medium prominent irregular strong brown (7.5YR 5/6) masses of iron oxide

throughout; many fine and medium faint light brownish gray (10YR 6/2) iron depletions throughout; moderately acid; clear wavy boundary.

2Btg5—38 to 45 inches; light brownish gray (10YR 6/2) silty clay loam; moderate very coarse prismatic structure; firm; few distinct dark gray (10YR 4/1) clay films lining root channels and pores; common distinct grayish brown (10YR 5/2) clay films on faces of peds; common prominent light gray (10YR 7/2) (dry) silt coatings on faces of peds; common medium prominent brownish yellow (10YR 6/8) masses of iron oxide throughout; slightly acid; clear wavy boundary.

2Btg6—45 to 62 inches; gray (10YR 6/1) silty clay loam; moderate very coarse prismatic structure; firm; many prominent light gray (10YR 7/2) (dry) silt coatings on faces of peds; common distinct gray (10YR 5/1) clay films on faces of peds; few medium prominent black (2.5Y 2.5/1) masses of iron and manganese oxide throughout; common medium and coarse prominent brownish yellow (10YR 6/6) masses of iron oxide throughout; slightly acid; clear wavy boundary.

2Btg7—62 to 70 inches; light brownish gray (10YR 6/2) silty clay; weak very coarse prismatic structure parting to moderate medium subangular blocky; very firm; few distinct gray (10YR 6/1) clay films on faces of peds and in pores; common fine prominent black (2.5Y 2.5/1) masses of iron and manganese oxide throughout; many medium prominent strong brown (7.5YR 5/6) masses of iron oxide throughout; 2 percent pressure faces throughout; slightly acid; gradual wavy boundary.

2BCg—70 to 80 inches; gray (10YR 6/1) silty clay; weak very coarse prismatic structure; firm; common fine prominent black (2.5Y 2.5/1) masses of iron and manganese oxide throughout; many coarse prominent irregular brownish yellow (10YR 6/6) masses of iron throughout; slightly acid.

Range in Characteristics

Thickness of the loess: Less than 20 inches
Thickness of the mollic epipedon: 10 to 20 inches
Depth to the base of the argillic horizon: 50 to 80 inches

Ap, A, or AB horizon:
Value—2 or 3
Chroma—1 or 2
Texture—silt loam, silty clay loam, or clay loam
Reaction—strongly acid to slightly alkaline (where limed)

Bt, Btg, 2Bt, or 2Btg horizon:
Hue—10YR, 2.5Y, 5Y, or N
Value—3 to 6
Chroma—0 to 2
Texture—clay, clay loam, silty clay, or silty clay loam
Reaction—strongly acid to slightly acid

2BCg or 2Cg horizon (where present):
Hue—10YR, 7.5YR, 2.5Y, 5Y, or N
Value—4 to 6
Chroma—0 to 8
Texture—clay, clay loam, silty clay, silty clay loam, or loam
Reaction—moderately acid to slightly alkaline

660D2—Coatsburg silt loam, 10 to 18 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Coatsburg and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have as much as 3 feet of loess over the underlying till
- Soils that do not have a seasonal high water table within a depth of 1 foot

Properties and Qualities of the Coatsburg Soil

Parent material: Paleosol that formed in till
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Very slow
Permeability below a depth of 60 inches: Slow
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 4.0 percent
Shrink-swell potential: High
Depth and months of the highest perched seasonal high water table: At the surface, January through May
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

660D3—Coatsburg silty clay loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Hills

Map Unit Composition

Coatsburg and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have as much as 3 feet of loess over the underlying till
- Soils that do not have a seasonal high water table within a depth of 1 foot

Properties and Qualities of the Coatsburg Soil

Parent material: Paleosol that formed in till
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Very slow
Permeability below a depth of 60 inches: Slow
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Depth and months of the highest perched seasonal high water table: At the surface, January through May
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

Coloma Series

Taxonomic classification: Mixed, mesic Lamellic Udipsamments

Typical Pedon

Coloma sand, 1 to 7 percent slopes; 1,500 feet east and 1,800 feet south of the northwest corner of sec. 20, T. 14 N., R. 5 W.; Mercer County, Illinois; USGS Joy topographic quadrangle; lat. 41 degrees 11 minutes 49 seconds N. and long. 90 degrees 59 minutes 23 seconds W., NAD 27:

Ap—0 to 9 inches; dark grayish brown (10YR 4/2) sand, light grayish brown (10YR 6/2) dry; weak medium granular structure; very friable; neutral; clear wavy boundary.

BE—9 to 16 inches; brown (10YR 4/3) sand; single grain; loose; neutral; gradual wavy boundary.

Bw1—16 to 29 inches; dark yellowish brown (10YR 4/4) sand; single grain; loose; slightly acid; gradual wavy boundary.

Bw2—29 to 50 inches; yellowish brown (10YR 5/4) sand; single grain; loose; slightly acid; abrupt smooth boundary.

E and Bt1—50 to 65 inches; about 95 percent yellowish brown (10YR 5/4) sand (E); single grain; loose; about 5 percent brown (7.5YR 4/4) loamy sand (Bt) consisting

of several thin lamellae (total thickness less than 1 inch); weak fine and medium subangular blocky structure; very friable; neutral; clear smooth boundary.

E and Bt2—65 to 80 inches; about 90 percent yellowish brown (10YR 5/4) sand (E); single grain; loose; about 10 percent brown (7.5YR 4/4) loamy sand (Bt) consisting of several thin lamellae (total thickness less than 2 inches); weak fine and medium subangular blocky structure; very friable; neutral.

Range in Characteristics

Depth to first lamellae: 40 to 60 inches

Ap or A horizon:
Hue—7.5YR or 10YR
Value—2 to 4
Chroma—1 to 3
Texture—sand or loamy sand

Bw horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—4 to 6
Texture—sand or loamy sand

E part of the E and Bt horizon:
Hue—5YR, 7.5YR, or 10YR
Value—4 to 7
Chroma—3 to 6
Texture—sand, loamy sand, or sandy loam

Bt part of the E and Bt horizon:
Hue—5YR, 7.5YR, or 10YR
Value—3 to 5
Chroma—3 to 6
Texture—sandy loam, loamy sand, or sand

C horizon (where present):
Hue—5YR, 7.5YR, or 10YR
Value—4 to 7
Chroma—3 to 6
Texture—sand

689B—Coloma sand, 2 to 7 percent slopes

Setting

Landform: Dunes
Position on the landform: Shoulders

Map Unit Composition

Coloma and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay in the surface layer or the upper part of the subsoil
- Soils that have a darker surface layer
- Soils that have less textural banding in the lower part

Properties and Qualities of the Coloma Soil

Parent material: Eolian sands
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Moderately rapid or rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 4.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Very high

Interpretive Groups

Land capability classification: 4s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

689D—Coloma sand, 7 to 15 percent slopes

Setting

Landform: Stream terraces and dunes
Position on the landform: Backslopes and shoulders

Map Unit Composition

Coloma and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay in the surface layer or the upper part of the subsoil
- Soils that have a darker surface layer
- Soils that have less textural banding in the lower part

Properties and Qualities of the Coloma Soil

Parent material: Eolian sands
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Moderately rapid or rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 4.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Very high

Interpretive Groups

Land capability classification: 6s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

689F—Coloma sand, 20 to 30 percent slopes

Setting

Landform: Dunes
Position on the landform: Shoulders

Map Unit Composition

Coloma and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay in the surface layer or the upper part of the subsoil
- Soils that have a darker surface layer
- Soils that have less textural banding in the lower part

Properties and Qualities of the Coloma Soil

Parent material: Eolian sands
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Moderately rapid or rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 4.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Very high

Interpretive Groups

Land capability classification: 7s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Coyne Series

Taxonomic classification: Coarse-loamy, mixed, active, mesic Typic Argiudolls

Typical Pedon

Coyne fine sandy loam, 0 to 2 percent slopes; 244 feet east and 847 feet south of the center of sec. 10, T. 20 N., R. 2 E.; Rock Island County, Illinois; USGS Cordova topographic quadrangle; lat. 41 degrees 44 minutes 04 seconds N. and long. 90 degrees 15 minutes 21 seconds W., NAD 27:

Ap—0 to 9 inches; very dark gray (10YR 3/1) fine sandy loam, gray (10YR 5/1) dry; weak coarse subangular blocky structure parting to moderate very fine and fine granular; very friable; slightly acid; abrupt smooth boundary.
A1—9 to 13 inches; black (10YR 2/1) fine sandy loam, dark gray (10YR 4/1) dry; weak coarse subangular blocky structure parting to moderate very fine and fine granular; very friable; slightly acid; clear smooth boundary.
A2—13 to 23 inches; very dark gray (10YR 3/1) and very dark grayish brown (10YR 3/2) fine sandy loam, gray (10YR 5/1) and grayish brown (10YR 5/2) dry; moderate fine granular structure; very friable; slightly acid; clear smooth boundary.
BA—23 to 28 inches; intermingled very dark grayish brown (10YR 3/2), dark brown (10YR 3/3), and dark grayish brown (10YR 4/2) fine sandy loam; weak coarse subangular blocky structure parting to very fine and fine granular; very friable; moderately acid; clear smooth boundary.
Bw—28 to 42 inches; brown (7.5YR 4/4) fine sandy loam; weak coarse subangular blocky structure; very friable; few fine black (10YR 2/1) iron and manganese concretions; moderately acid; clear smooth boundary.
2Bt1—42 to 52 inches; reddish brown (5YR 4/4) silty clay loam; strong medium and coarse subangular blocky structure; firm; many distinct dark reddish brown (5YR 3/3) clay films on faces of peds; moderately acid; abrupt smooth boundary.
2Bt2—52 to 55 inches; reddish brown (5YR 4/4) loam; strong medium and coarse subangular blocky structure; firm; many distinct dark reddish brown (5YR 3/3) clay films on faces of peds; moderately acid; abrupt smooth boundary.
3C—55 to 60 inches; brown (7.5YR 4/4) sand and gravel; single grain; loose; moderately acid.

Range in Characteristics

Thickness of the solum: 48 to 72 inches
Depth to argillic horizon: More than 40 inches

A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 to 3
Texture—loam, fine sandy loam, or loamy fine sand
Reaction—moderately acid to neutral

Bw horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 5
Texture—loam or fine sandy loam
Reaction—moderately acid to neutral

2Bt horizon:
Hue—5YR or 2.5YR
Value—4 to 6
Chroma—3 to 6
Texture—loam, silt loam, silty clay loam, or silty clay
Reaction—moderately acid to neutral

3C horizon:
Hue—7.5YR or 10YR
Value—3 to 6

Chroma—3 to 8
Texture—sand or sand and gravel with strata of clay loam, loam, silty clay loam, or silt loam
Reaction—moderately acid to moderately alkaline

764B—Coyne fine sandy loam, 2 to 5 percent slopes

Setting

Landform: Lake plains
Position on the landform: Summits and shoulders

Map Unit Composition

Coyne and similar soils 100 percent

Minor Components

Similar soils:
- Soils that contain more sand throughout
- Soils that have a seasonal high water table within a depth of 60 inches

Properties and Qualities of the Coyne Soil

Parent material: Lacustrine deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Derinda Series

Taxonomic classification: Fine, mixed, active, mesic Oxyaquic Hapludalfs

Typical Pedon

Derinda silt loam; 480 feet east and 2,060 feet north of the southwest corner of sec. 32, T. 26 N., R. 6 E.; Stephenson County, Illinois; USGS Boone Branch topographic quadrangle; lat. 42 degrees 12 minutes 14 seconds N. and long. 89 degrees 50 minutes 35 seconds W., NAD 27:

Ap—0 to 7 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; weak medium granular structure; friable; many fine and medium roots;

few light gray (10YR 7/1 and 7/2) silt coatings; few distinct black (10YR 2/1) iron and manganese oxide concretions; slightly acid; abrupt smooth boundary.

BE—7 to 12 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate fine and medium subangular blocky structure; firm; common fine and medium roots; very dark grayish brown (10YR 3/2 to 4/2) worm channel fillings; slightly acid; clear smooth boundary.

Bt1—12 to 18 inches; brown (10YR 4/3) silty clay loam; moderate very fine and fine subangular blocky structure; firm; common distinct brown (10YR 4/3) clay films; few fine distinct yellowish brown (10YR 5/6) and strong brown (7.5YR 5/6) masses of iron and manganese; few fine distinct black (10YR 2/1) iron and manganese concretions; common fine and medium roots; 2 percent small chert fragments; slightly acid; clear smooth boundary.

2Bt2—18 to 23 inches; variegated grayish brown (10YR 5/2) and yellowish brown (10YR 5/4) silty clay; moderate fine and medium prismatic structure parting to strong fine and medium angular blocky; firm; common distinct dark gray (10YR 4/1) clay films; common fine distinct yellowish brown (10YR 5/6) and strong brown (7.5YR 5/6) masses of iron and manganese; many fine distinct black (10YR 2/1) iron and manganese concretions; common fine and medium roots; 3 percent small chert fragments; neutral; clear smooth boundary.

2BCt—23 to 25 inches; variegated brownish yellow (10YR 6/6), yellow (10YR 7/8), and strong brown (7.5YR 5/6 and 5/8) loam; material appears to be mainly disintegrated soft limestone; weak medium angular blocky structure; very friable; many distinct dark grayish brown (10YR 4/2) coatings in root channels; many fine distinct black (10YR 2/1) iron and manganese specks; few fine and medium roots; slightly alkaline; clear smooth boundary.

2Cr—25 to 60 inches; gray (5Y 6/1), pale olive (5Y 6/3), dark gray (10R 4/1), gray (10R 5/1), and grayish brown (10R 5/2) clay shale; spots of white (10YR 8/1) lime in the pale olive (5Y 6/3) zones; a few brownish yellow (10YR 6/6) to yellow (10YR 7/8) limestone slabs 2 to 3 inches thick are within the upper 12 inches in a discontinuous pattern; within the shale, limestone chunks 1 to 3 inches in diameter occupy about 5 percent of the volume; weak coarse angular blocky inherited rock structure; extremely firm; few fine and medium roots in the upper part; slightly alkaline.

Range in Characteristics

Depth to paralithic or lithic contact: 20 to 40 inches
Depth to residuum from shale: 15 to 30 inches

Ap or A horizon:
Hue—10YR
Value—4
Chroma—2 to 4
Texture—silt loam

Bt horizon:
Hue—10YR
Value—4 or 5
Chroma—3 or 4
Texture—silty clay loam

2Bt horizon:
Hue—10YR
Value—4 or 5
Chroma—2 to 6
Texture—silty clay, clay, or silty clay loam

2Cr horizon:
Kind of material—residuum weathered from shale

417D3—Derinda silty clay loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Derinda and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches or more than 30 inches of loess on the surface
- Soils that have till above the bedrock

Properties and Qualities of the Derinda Soil

Parent material: Thin layer of loess over residuum weathered from calcareous shale
Drainage class: Moderately well drained
Slowest permeability within a depth of 40 inches: Impermeable
Permeability below a depth of 60 inches: Impermeable to very slow
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Available water capacity: About 5.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest perched seasonal high water table: 2.5 feet, February through April
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

417E2—Derinda silt loam, 18 to 25 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Derinda and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches or more than 30 inches of loess on the surface
- Soils that have till above the bedrock

Properties and Qualities of the Derinda Soil

Parent material: Thin layer of loess over residuum weathered from calcareous shale
Drainage class: Moderately well drained
Slowest permeability within a depth of 40 inches: Impermeable
Permeability below a depth of 60 inches: Impermeable to very slow
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Available water capacity: About 6.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest perched seasonal high water table: 2.5 feet, March through April
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Very high
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Dickinson Series

Taxonomic classification: Coarse-loamy, mixed, superactive, mesic Typic Hapludolls

Typical Pedon

Dickinson sandy loam (fig. 3), 0 to 2 percent slopes; 360 feet north and 1,720 feet west of the center of sec. 17, T. 17 N., R. 6 E.; Bureau County, Illinois; USGS Mineral topographic quadrangle; lat. 41 degrees 27 minutes 37 seconds N. and long. 89 degrees 50 minutes 09 seconds W., NAD 27:

Ap—0 to 8 inches; very dark brown (10YR 2/2) sandy loam, dark grayish brown (10YR 4/2) dry; weak fine granular structure; very friable; few fine roots; moderately acid; abrupt smooth boundary.

A1—8 to 15 inches; very dark brown (10YR 2/2) sandy loam, dark grayish brown (10YR 4/2) dry; weak medium subangular blocky structure; very friable; few fine roots; moderately acid; clear smooth boundary.

A2—15 to 20 inches; very dark grayish brown (10YR 3/2) sandy loam, grayish brown (10YR 5/2) dry; weak medium subangular blocky structure; very friable; few fine roots; common very dark brown (10YR 2/2) organic coatings on faces of peds; slightly acid; clear smooth boundary.

Bw—20 to 31 inches; brown (10YR 4/3) sandy loam; weak medium prismatic structure parting to weak medium subangular blocky; very friable; few fine roots; many distinct dark brown (10YR 3/3) organic coatings on faces of peds; slightly acid; clear smooth boundary.



Figure 3.—A profile of a Dickinson soil. Depth is marked in centimeters.

Bt—31 to 36 inches; yellowish brown (10YR 5/6) loamy sand; weak medium prismatic structure parting to weak medium subangular blocky; very friable; common distinct brown (10YR 4/3) clay films bridging sand grains; slightly acid; clear smooth boundary.

BC—36 to 47 inches; yellowish brown (10YR 5/6) sand; weak coarse prismatic structure; very friable; moderately acid; clear smooth boundary.

C—47 to 60 inches; yellowish brown (10YR 5/6) sand; single grain; loose; strong brown (7.5YR 5/6) bands 1/2 inch to 2 inches thick at depths of 52, 56, and 58 inches; moderately acid.

Range in Characteristics

Thickness of the mollic epipedon: 12 to 20 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 to 3
Texture—fine sandy loam, sandy loam, or loam

Bw horizon:
Hue—10YR
Value—3 to 5
Chroma—2 to 4
Texture—sandy loam or fine sandy loam

BC and/or C horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 6
Texture—loamy sand, sand, loamy fine sand, or fine sand

87A—Dickinson sandy loam, 0 to 2 percent slopes

Setting

Landform: Stream terraces and outwash plains
Position on the landform: Summits

Map Unit Composition

Dickinson and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a dark surface soil more than 24 inches thick
- Soils that have more sand and gravel
- Soils that have more clay
- Soils that have a dark surface layer less than 10 inches thick
- Soils that have thin clayey subhorizons in the subsoil
- Soils that are calcareous in the lower part of the subsoil and in the substratum

Dissimilar soils:
- The somewhat poorly drained Hoopeston and poorly drained Gilford soils on footslopes

Properties and Qualities of the Dickinson Soil

Parent material: Eolian sands over outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 5.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete

Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 2s
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

87B—Dickinson sandy loam, 2 to 5 percent slopes

Setting

Landform: Stream terraces and outwash plains
Position on the landform: Shoulders and summits

Map Unit Composition

Dickinson and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have a dark surface soil more than 24 inches thick
- Soils that have more sand and gravel
- Soils that have more clay
- Soils that have a dark surface soil less than 10 inches thick
- Soils that have thin clayey subhorizons in the subsoil
- Soils that are calcareous in the lower part of the subsoil and in the substratum

Dissimilar soils:
- The somewhat poorly drained Hoopeston and poorly drained Gilford soils on footslopes

Properties and Qualities of the Dickinson Soil

Parent material: Loamy and/or sandy alluvium and/or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 5.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

87C2—Dickinson sandy loam, 5 to 10 percent slopes, eroded

Setting

Landform: Dunes
Position on the landform: Backslopes

Map Unit Composition

Dickinson and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have a dark surface soil more than 24 inches thick
- Soils that have more sand and gravel
- Soils that have more clay
- Soils that have a dark surface soil less than 10 inches thick
- Soils that have thin clayey subhorizons in the subsoil
- Soils that are calcareous in the lower part of the subsoil and in the substratum

Dissimilar soils:
- The somewhat poorly drained Hoopeston and poorly drained Gilford soils on footslopes

Properties and Qualities of the Dickinson Soil

Parent material: Eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 5.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Dorchester Series

Taxonomic classification: Fine-silty, mixed, superactive, calcareous, mesic Typic Udifluvents

Typical Pedon

Dorchester silt loam, 0 to 2 percent slopes; 1,600 feet east and 1,650 feet south of the northwest corner of sec. 36, T. 10 N., R. 6 E.; Peoria County, Illinois; USGS Oak Hill

topographic quadrangle; lat. 40 degrees 48 minutes 31 seconds N. and long. 89 degrees 46 minutes 11 seconds W., NAD 27:

Ap—0 to 9 inches; dark grayish brown (10YR 4/2) silt loam, gray (10YR 6/1) dry; weak medium platy structure parting to weak very fine subangular blocky; friable; few very fine roots; few faint very dark grayish brown (10YR 3/2) organic stains on faces of peds; slightly effervescent; slightly alkaline; abrupt smooth boundary.

C—9 to 32 inches; stratified dark grayish brown (10YR 4/2), grayish brown (10YR 5/2), brown (10YR 5/3), very dark gray (10YR 3/1), and very dark grayish brown (10YR 3/2) silt loam; few thin strata of loam; massive with moderate thin bedding planes resulting from stratification; friable; few very fine roots; slightly effervescent; slightly alkaline; abrupt smooth boundary.

2Ab1—32 to 43 inches; black (10YR 2/1) silt loam; weak fine subangular blocky structure parting to weak very fine granular; friable; slightly alkaline; gradual smooth boundary.

2Ab2—43 to 60 inches; very dark gray (10YR 3/1) silt loam; moderate fine subangular blocky structure; friable; many faint black (10YR 2/1) organic stains on faces of peds; few fine distinct brown (10YR 4/3) masses of iron in the matrix below a depth of 48 inches; slightly alkaline.

Range in Characteristics

Thickness of the solum: Less than 10 inches
Depth to the 2Ab horizon: 20 to 45 inches

Ap or A horizon:
Hue—10YR
Value—3 or 4
Chroma—2 or 3
Texture—silt loam, loam, or silty clay loam

C horizon:
Hue—10YR
Value—3 to 5
Chroma—2 or 3
Texture—silt loam; thin strata of loam in some pedons

2Ab horizon:
Hue—10YR
Value—2 or 3
Chroma—1 to 3
Texture—clay loam, silt loam, or silty clay loam

1239A—Dorchester silt loam, undrained, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Dorchester and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a seasonal high water table at a depth as shallow as 2 feet
- Soils that are not calcareous

Properties and Qualities of the Dorchester Soil

Parent material: Alluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, November through June
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 5w
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

8239A—Dorchester silt loam, 0 to 2 percent slopes, occasionally flooded

Setting

Landform: Flood plains

Map Unit Composition

Dorchester and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a seasonal high water table at a depth as shallow as 2 feet
- Soils that are not calcareous

Properties and Qualities of the Dorchester Soil

Parent material: Alluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Moderate
Frequency and most likely period of flooding: Occasional, November through June
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

8239B—Dorchester silt loam, 2 to 5 percent slopes, occasionally flooded

Setting

Landform: Flood plains

Map Unit Composition

Dorchester and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a seasonal high water table at a depth as shallow as 2 feet
- Soils that are not calcareous

Properties and Qualities of the Dorchester Soil

Parent material: Alluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Moderate
Frequency and most likely period of flooding: Occasional, November through June
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Drummer Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Endoaquolls

Typical Pedon

Drummer silty clay loam; on the University of Illinois south farm 1 mile south of Urbana; 1,600 feet east and 300 feet north of the southwest corner of sec. 19, T. 19 N., R. 9 E.; Champaign County, Illinois; USGS Urbana topographic quadrangle; lat. 40 degrees 05 minutes 04 seconds N. and long. 88 degrees 13 minutes 58 seconds W.; UTM Zone 16T 0394896E 4437648N, NAD 27:

Ap—0 to 7 inches; black (10YR 2/1) silty clay loam, dark gray (10YR 4/1) dry; weak fine granular structure; firm; many fine roots; moderately acid; clear smooth boundary.
A—7 to 14 inches; black (10YR 2/1) silty clay loam, dark gray (10YR 4/1) dry; moderate fine subangular blocky structure parting to weak fine granular; firm; many fine and medium roots; slightly acid; clear smooth boundary.
BA—14 to 19 inches; very dark gray (10YR 3/1) silty clay loam, gray (10YR 5/1) dry; moderate fine and medium subangular blocky structure; firm; many fine and medium roots; few fine faint very dark grayish brown (2.5Y 3/2) masses of iron and manganese accumulation in the matrix; slightly acid; gradual smooth boundary.
Bg—19 to 25 inches; dark gray (10YR 4/1) silty clay loam; moderate fine prismatic structure parting to moderate fine angular blocky; firm; many fine roots; common fine distinct and prominent yellowish brown (10YR 5/6) masses of iron accumulation in the matrix; many worm holes; neutral; gradual smooth boundary.
Btg1—25 to 32 inches; grayish brown (2.5Y 5/2) silty clay loam; weak fine and medium prismatic structure parting to moderate fine angular blocky; firm; many fine roots; common distinct dark gray (N 4/0) clay films on faces of peds; many medium distinct yellowish brown (10YR 5/4) masses of iron and manganese accumulation in the matrix; neutral; gradual wavy boundary.
Btg2—32 to 41 inches; gray (N 5/0) silty clay loam; weak medium prismatic structure parting to weak medium angular blocky; firm; few fine roots; few distinct dark gray (N 4/0) clay films on faces of peds; many medium prominent yellowish brown (10YR 5/4) masses of iron and manganese accumulation in the matrix; neutral; clear wavy boundary.
2Btg3—41 to 47 inches; gray (N 5/0) loam; weak coarse subangular blocky structure; friable; few fine roots; few distinct dark gray (10YR 4/1) clay films on faces of peds; common medium prominent yellowish brown (10YR 5/6) masses of iron accumulation in the matrix; 4 percent fine gravel; neutral; abrupt wavy boundary.
2Cg—47 to 60 inches; dark gray (10YR 4/1), stratified loam and sandy loam; massive; friable; many medium prominent olive brown (2.5Y 4/4) masses of iron and manganese accumulation in the matrix; many medium distinct gray (N 5/0) iron depletions in the matrix; slightly alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 22 inches
Thickness of the loess: 40 to 60 inches
Depth to free carbonates: 40 to 65 inches
Thickness of the solum: 42 to 65 inches

Ap or A horizon:
Hue—10YR, 2.5Y, 5Y, or N
Value—2 or 3
Chroma—0 to 2
Texture—silty clay loam

Bg or Btg horizon:
Hue—10YR, 2.5Y, 5Y, or N
Value—3 to 6
Chroma—0 to 4
Texture—silty clay loam or silt loam (lower part)

2Bg or 2Btg horizon:
Hue—7.5YR to 5Y or N
Value—4 to 6
Chroma—0 to 2

Texture—loam or silt loam with strata of sandy loam, clay loam, sandy clay loam, or silty clay loam

2C or 2Cg horizon:
Hue—7.5YR to 5Y or N
Value—4 to 7
Chroma—0 to 8
Texture—stratified loam, silt loam, clay loam, sandy clay loam, silty clay loam, or sandy loam

152A—Drummer silty clay loam, 0 to 2 percent slopes

Setting

Landform: Outwash plains
Position on the landform: Toeslopes

Map Unit Composition

Drummer and similar soils: 92 percent
Dissimilar soils: 8 percent

Minor Components

Similar soils:
- Soils that have unstratified silt loam in the substratum
- Soils that contain more sand throughout
- Soils that do not have a seasonal high water table within a depth of 2 feet
- Soils that have a dark surface layer more than 24 inches thick
- Soils that contain less clay in the subsurface layer and the upper part of the subsoil

Dissimilar soils:
- Soils along drainage ditches that are subject to rare flooding

Properties and Qualities of the Drummer Soil

Parent material: Loess over outwash
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 5.0 to 7.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

Dubuque Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Dubuque silt loam, 10 to 15 percent slopes, eroded; 2,600 feet west and 2,600 feet north of the southeast corner of sec. 28, T. 29 N., R. 2 E.; Jo Daviess County, Illinois; USGS Scales Mound West topographic quadrangle; lat. 42 degrees 28 minutes 56 seconds N. and long. 90 degrees 17 minutes 33 seconds W., NAD 27:

Ap—0 to 7 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; moderate medium and fine granular structure; friable; common very fine roots; fragments of yellowish brown (10YR 5/4) subsoil mixed in the lower part; neutral; clear smooth boundary.

Bt1—7 to 13 inches; yellowish brown (10YR 5/4) silty clay loam; moderate fine and very fine subangular blocky structure; friable; common very fine roots; common fragments of dark grayish brown (10YR 4/2) mixed in the upper part; common distinct brown (10YR 4/3) clay films on faces of peds; slightly acid; gradual smooth boundary.

Bt2—13 to 20 inches; yellowish brown (10YR 5/4) silty clay loam; moderate fine subangular blocky structure; friable; common very fine roots; common distinct brown (10YR 4/3) clay films on faces of peds; moderately acid; gradual smooth boundary.

Bt3—20 to 29 inches; yellowish brown (10YR 5/4) silty clay loam; moderate medium subangular blocky structure; friable; common very fine roots; common distinct brown (10YR 4/3) clay films on faces of peds; neutral; gradual smooth boundary.

2Bt4—29 to 33 inches; brown (7.5YR 5/4) and strong brown (7.5YR 5/6) silty clay; moderate medium and fine angular blocky structure; firm; many distinct brown (7.5YR 4/2) clay films on faces of peds; neutral; abrupt smooth boundary.

2R—33 to 60 inches; hard dolomitic limestone with an inch of soft yellow (10YR 8/6) fragmented limestone in the upper part.

Range in Characteristics

Depth to dolomitic limestone: 20 to 40 inches

A or Ap horizon:
- Hue—10YR
- Value—3 to 5
- Chroma—1 to 3
- Texture—silt loam or silty clay loam

E horizon (where present):
- Hue—10YR
- Value—4 or 5
- Chroma—2 or 3
- Texture—silt loam or silty clay loam

Bt horizon:
- Hue—10YR
- Value—4 or 5
- Chroma—3 to 6
- Texture—silt loam or silty clay loam

2Bt horizon:
- Hue—5YR, 7.5YR, or 10YR
- Value—4 to 6

Chroma—3 to 8
Texture—silty clay or clay

29D3—Dubuque clay loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Dubuque and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more sand and less silt in the upper part
- Soils that are either less than 20 inches or more than 40 inches deep to the underlying bedrock

Properties and Qualities of the Dubuque Soil

Parent material: Loess over a thin layer of residuum weathered from limestone
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow or very slow
Depth to restrictive feature: 20 to 30 inches to bedrock (lithic)
Available water capacity: About 4.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Very low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Dunbarton Series

Taxonomic classification: Clayey, smectitic, mesic Lithic Hapludalfs

Typical Pedon

Dunbarton silt loam, 18 to 60 percent slopes; at an elevation of 690 feet; 500 feet east and 2,600 feet north of the southwest corner of sec. 4, T. 11 N., R. 3 W.; Warren County, Illinois; USGS Monmouth topographic quadrangle; lat. 40 degrees 58 minutes 25 seconds N. and long. 90 degrees 44 minutes 42 seconds W., NAD 27:

A—0 to 2 inches; very dark grayish brown (10YR 3/2) silt loam, pale brown (10YR 6/3) dry; weak and moderate medium granular structure; friable; common fine and medium roots; neutral; abrupt smooth boundary.
E—2 to 4 inches; brown (10YR 5/3) silt loam; weak thin platy structure; friable; about 1 percent gravel; moderately acid; abrupt smooth boundary.
BE—4 to 10 inches; yellowish brown (10YR 5/4) silt loam; weak fine subangular blocky structure; friable; many distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; about 5 percent gravel; moderately acid; clear wavy boundary.
2Bt—10 to 16 inches; reddish brown (5YR 4/4) silty clay; strong medium subangular blocky structure; firm; common faint reddish brown (5YR 4/3) clay films on faces of peds; about 10 percent gravel; slightly acid; abrupt smooth boundary.
2Cr—16 to 20 inches; fractured limestone bedrock with reddish brown (5YR 4/4) clay in vertical and horizontal cracks.
2R—20 inches; limestone bedrock.

Range in Characteristics

Thickness of the loess: 0 to 15 inches
Depth to bedrock: 12 to 20 inches

A horizon:
Value—3 or 4

E horizon:
Value—4 or 5
Chroma—2 or 3

2Bt horizon:
Hue—5YR or 7.5YR
Value—4 or 5
Chroma—3 or 4
Texture—silty clay or clay

505D2—Dunbarton silt loam, 6 to 12 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Dunbarton and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less clay throughout
- Soils that are underlain by calcareous shale bedrock
- Soils that are more than 20 inches deep to bedrock
- Soils that have a darker surface horizon

Dissimilar soils:
- The well drained Beavercreek soils on flood plains and in drainageways

Properties and Qualities of the Dunbarton Soil

Parent material: Thin mantle of loess over clayey pedisediment and/or residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 12 to 20 inches to bedrock (lithic)
Available water capacity: About 3.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

505D3—Dunbarton silty clay loam, 6 to 12 percent slopes, severely eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Dunbarton and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less clay throughout
- Soils that are underlain by calcareous shale bedrock
- Soils that are more than 20 inches deep to bedrock
- Soils that have a darker surface horizon

Dissimilar soils:
- The well drained Beavercreek soils on flood plains and in drainageways

Properties and Qualities of the Dunbarton Soil

Parent material: Thin mantle of loess over clayey pedisediment and/or residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 12 to 20 inches to bedrock (lithic)

Available water capacity: About 2.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.0 to 0.5 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

505E2—Dunbarton silt loam, 12 to 20 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Dunbarton and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less clay throughout
- Soils that are underlain by calcareous shale bedrock
- Soils that are more than 20 inches deep to bedrock
- Soils that have a darker surface horizon

Properties and Qualities of the Dunbarton Soil

Parent material: Thin mantle of loess over clayey pedisediment and/or residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 12 to 20 inches to bedrock (lithic)
Available water capacity: About 2.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

505E3—Dunbarton silty clay loam, 12 to 20 percent slopes, severely eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Dunbarton and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less clay throughout
- Soils that are underlain by calcareous shale bedrock
- Soils that are more than 20 inches deep to bedrock

Dissimilar soils:
- The well drained Beavercreek soils on flood plains and in drainageways

Properties and Qualities of the Dunbarton Soil

Parent material: Thin mantle of loess over clayey pedisediment and/or residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 12 to 20 inches to bedrock (lithic)
Available water capacity: About 2.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.0 to 0.5 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 7e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

505F2—Dunbarton silt loam, 20 to 35 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Dunbarton and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less clay throughout
- Soils that are underlain by calcareous shale bedrock
- Soils that are more than 20 inches deep to bedrock
- Soils that have a darker surface horizon

Dissimilar soils:
- The well drained Beavercreek soils on flood plains and in drainageways

Properties and Qualities of the Dunbarton Soil

Parent material: Thin mantle of loess over clayey pedisediment and/or residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 12 to 20 inches to bedrock (lithic)
Available water capacity: About 3.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Very high
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 7e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

505G—Dunbarton silt loam, 35 to 60 percent slopes

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Dunbarton and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less clay throughout
- Soils that are underlain by calcareous shale bedrock
- Soils that are more than 20 inches deep to bedrock
- Soils that have a darker surface horizon

Dissimilar soils:
- The well drained Beavercreek soils on flood plains and in drainageways

Properties and Qualities of the Dunbarton Soil

Parent material: Thin mantle of loess over clayey pedisediment and/or residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 12 to 20 inches to bedrock (lithic)
Available water capacity: About 2.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 7e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Durand Series

Taxonomic classification: Fine-loamy, mixed, superactive, mesic Typic Argiudolls
Taxadjunct features: The Durand soils in map units 416C2 and 416C3 have a thinner dark surface layer than is defined as the range for the series. The Durand soil in map unit 416C2 is classified as a fine-loamy, mixed, superactive, mesic Mollic Hapludalf. The Durand soil in map unit 416C3 is classified as a fine-loamy, mixed, superactive, mesic Typic Hapludalf.

Typical Pedon

Durand silt loam, 2 to 5 percent slopes; 600 feet south and 405 feet east of the northwest corner of sec. 30, T. 28 N., R. 9 E.; Stephenson County, Illinois; USGS Dakota topographic quadrangle; 42 degrees 24 minutes 08 seconds N. and long. 89 degrees 30 minutes 51 seconds W., NAD 27:

Ap—0 to 9 inches; very dark brown (10YR 2/2) silt loam, dark grayish brown (10YR 4/2) and grayish brown (10YR 5/2) dry; moderate fine subangular blocky structure

parting to moderate medium granular; friable; many fine and medium roots; layer compacted because of tillage practices; slightly acid; abrupt smooth boundary.

AB—9 to 13 inches; 70 percent dark brown (10YR 3/3) and 30 percent very dark grayish brown (10YR 3/2) silt loam; dark brown (10YR 3/3) crushed; brown (10YR 5/3) dry; moderate fine and medium granular structure; friable; many fine and medium roots; slightly acid; clear smooth boundary.

Bt1—13 to 21 inches; dark yellowish brown (10YR 4/4) and brown (10YR 4/3) silty clay loam; dark yellowish brown (10YR 4/4) crushed; moderate fine subangular blocky structure; friable; many fine and medium roots; common faint dark brown (10YR 3/3) organo-clay films on faces of peds; moderately acid; clear smooth boundary.

2Bt2—21 to 26 inches; brown (7.5YR 4/4) clay loam; moderate fine subangular blocky structure; firm; common fine and medium roots; common faint brown (7.5YR 4/4) clay films on faces of peds; moderately acid; clear smooth boundary.

2Bt3—26 to 35 inches; brown (7.5YR 4/4) clay loam; moderate fine and medium subangular blocky structure; firm; common fine and medium roots; common faint reddish brown (5YR 4/3) clay films on faces of peds; few large pebbles; moderately acid; clear smooth boundary.

2Bt4—35 to 47 inches; reddish brown (5YR 4/4) clay loam; moderate medium and coarse subangular and angular blocky structure; firm; few fine and medium roots; common faint reddish brown (5YR 4/3) clay films on faces of peds; about 5 percent pebbles; moderately acid; clear smooth boundary.

2Bt5—47 to 66 inches; brown (7.5YR 4/4) clay loam; moderate medium and coarse subangular and angular blocky structure; firm; few fine and medium roots; common faint reddish brown (5YR 4/4) clay films on faces of peds; occasional streaks of reddish brown (2.5YR 4/4) clay residuum weathered from dolomitic limestone; about 5 percent pebbles; slightly acid; clear smooth boundary.

2BC—66 to 77 inches; brown (7.5YR 4/4) clay loam; weak medium subangular blocky structure; friable; few fine and medium roots; about 7 percent pebbles; slightly acid; abrupt wavy boundary.

2C—77 to 86 inches; variegated yellowish brown (10YR 5/4) and light yellowish brown (10YR 6/4) sandy loam; massive; friable; about l0 percent gravel; strongly effervescent; moderately alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches
Thickness of the loess: 15 to 30 inches
Thickness of the solum: 48 to 90 inches

Ap or A horizon:
- Hue—10YR
- Value—2 or 3
- Chroma—1 or 2
- Texture—silt loam

Bt horizon:
- Hue—10YR or 7.5YR
- Value—4 or 5
- Chroma—3 to 6
- Texture—silt loam or silty clay loam

2Bt horizon:
- Hue—10YR, 7.5YR, 5YR, or 2.5YR
- Value—4 or 5
- Chroma—4 to 6
- Texture—clay loam, sandy clay loam, loam, or sandy loam or the gravelly analogs of these textures

2C horizon:
Hue—10YR or 7.5YR
Value—5 or 6
Chroma—4 to 6
Texture—gravelly sandy loam, sandy loam, or loam

416C2—Durand silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Durand and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches of loess over the underlying till
- Soils that have unweathered, calcareous till within a depth of 4 feet

Properties and Qualities of the Durand Soil

Parent material: Thin layer of loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

416C3—Durand silty clay loam, 5 to 10 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Durand and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches of loess over the underlying till
- Soils that have unweathered, calcareous till within a depth of 4 feet

Properties and Qualities of the Durand Soil

Parent material: Thin layer of loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.2 to 1.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

835G—Earthen dam

- This map unit consists of soil material in embankments used for the impoundment of water.

Interpretive Groups

Land capability classification: None assigned
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Edgington Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Argiaquic Argialbolls

Typical Pedon

Edgington silt loam, 0 to 2 percent slopes; 222 feet west and 45 feet north of the southeast corner of NE1/4 sec. 5, T. 25 N., R. 7 E.; Carroll County, Illinois; USGS Shannon topographic quadrangle; lat. 42 degrees 11 minutes 30.1 seconds N. and long. 89 degrees 42 minutes 31 seconds W., NAD 27:

A1—0 to 16 inches; black (10YR 2/1) silt loam; moderate medium granular structure; friable; many fine and medium roots; slightly acid; gradual smooth boundary.
A2—16 to 20 inches; very dark brown (10YR 2/2) and very dark grayish brown (10YR 3/2) silt loam; moderate medium granular structure; friable; many fine and medium roots; strongly acid; clear smooth boundary.

E—20 to 31 inches; dark grayish brown (10YR 4/2) and grayish brown (10YR 5/2) silt loam; weak medium platy structure parting to weak fine granular; friable; common fine and medium roots; few fine distinct dark yellowish brown (10YR 4/4) redoximorphic concentrations; common black (10YR 2/1) nodules and concretions (iron and manganese oxides); strongly acid; clear smooth boundary.

Btg1—31 to 35 inches; dark gray (5Y 4/1) silty clay loam; moderate fine subangular blocky structure; friable; few fine and medium roots; few dark gray (10YR 4/1) clay films on faces of peds: few fine prominent yellowish brown (10YR 5/4) masses of iron; common prominent black (10YR 2/1) nodules and concretions (iron and manganese oxides); strongly acid; gradual smooth boundary.

Btg2—35 to 41 inches; gray (10YR 5/1) silty clay loam; weak medium prismatic structure parting to moderate fine and medium angular blocky; firm; few fine and medium roots; common faint dark gray (10YR 4/1) clay films on faces of peds; few fine distinct dark yellowish brown (10YR 4/4) and few fine prominent yellowish brown (10YR 5/6) masses of iron; common black (10YR 2/1) nodules and concretions (iron and manganese oxides); moderately acid; gradual smooth boundary.

Btg3—41 to 49 inches; gray (10YR 5/1) silty clay loam; weak medium and coarse prismatic structure parting to strong medium angular blocky; firm; few fine and medium roots; common faint dark gray (10YR 4/1) and very dark gray (10YR 3/1) clay films on faces of peds; common fine prominent brown (7.5YR 4/4) and yellowish brown (10YR 5/6) masses of iron; common black (10YR 2/1) nodules and concretions (iron and manganese oxides); moderately acid; clear smooth boundary.

Btg4—49 to 55 inches; gray (10YR 5/1) and light brownish gray (10YR 6/2) silty clay loam; weak medium and coarse angular blocky structure; firm; few fine and medium roots; common faint dark gray (10YR 4/1) clay films on faces of peds; many fine prominent brown (7.5YR 4/4) and strong brown (7.5YR 5/6) masses of iron; common black (10YR 2/1) nodules and concretions (iron and manganese oxides); very dark gray (10YR 3/1) krotovina crosses the horizon; moderately acid; gradual smooth boundary.

Cg—55 to 60 inches; gray (10YR 5/1), yellowish brown (10YR 5/6), and light brownish gray (10YR 6/2) silt loam; massive; friable; few distinct dark brown (7.5YR 3/2) masses of iron and manganese oxides; slightly acid.

Range in Characteristics

Thickness of the mollic epipedon: 15 to 24 inches
Thickness of the solum: More than 42 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—silt loam

E or Eg horizon:
Hue—10YR
Value—4 or 5
Chroma—1 or 2
Texture—silt loam
Thickness—7 to 12 inches

Bt or Btg horizon:
Hue—10YR, 2.5Y, or 5Y
Value—4 to 6

Chroma—1 or 2
Texture—silty clay loam or silt loam

272A—Edgington silt loam, 0 to 2 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Toeslopes

Map Unit Composition

Edgington and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that are underlain by loamy or sandy drift within a depth of 5 feet; on terraces
- Soils that formed in water-laid deposits instead of in loess

Properties and Qualities of the Edgington Soil

Parent material: Silty loess
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderately slow
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 4.5 to 6.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

Eleroy Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs

Typical Pedon

Eleroy silt loam, 10 to 18 percent slopes, eroded; 825 feet east and 495 feet north of the center of sec. 1, T. 25 N., R. 5 E.; Carroll County, Illinois; USGS Boone Branch topographic quadrangle; lat. 42 degrees 11 minutes 28 seconds N. and long. 89 degrees 52 minutes 04 seconds W., NAD 27:

Ap—0 to 7 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; moderate medium granular structure; friable; slightly acid; abrupt smooth boundary.
E—7 to 12 inches; grayish brown (10YR 5/2) silt loam, light brownish gray (10YR 6/2) dry; weak medium and thick platy structure parting to weak fine and medium granular; friable; slightly acid; clear wavy boundary.
BE—12 to 15 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate medium subangular blocky structure; firm; some light gray (10YR 7/2) (dry) silt coatings on faces of peds; slightly acid; clear smooth boundary.
Bt1—15 to 22 inches; dark yellowish brown (10YR 4/4) silty clay loam; strong medium subangular blocky structure; firm; common faint brown (10YR 4/3) clay films on faces of peds; few very dark brown (10YR 2/2) iron and manganese oxides; moderately acid; gradual smooth boundary.
Bt2—22 to 32 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate medium subangular blocky structure; firm; common faint brown (10YR 4/3) clay films on faces of peds; few medium faint yellowish brown (10YR 5/8) masses of iron and manganese oxides; moderately acid; gradual smooth boundary.
2Bt3—32 to 41 inches; olive brown (2.5Y 4/3) silty clay loam; weak coarse subangular blocky structure; firm; common distinct dark grayish brown (10YR 4/2) clay films; few medium distinct yellowish brown (10YR 5/8) masses of iron and manganese oxides; 3 percent pebbles of igneous rock; slightly acid; abrupt smooth boundary.
2Cr—41 to 50 inches; gray (5Y 6/1) clay shale; common coarse prominent light olive brown (2.5Y 5/4) stains of oxidized iron and manganese on fragment surfaces; massive; very firm; calcareous.

Range in Characteristics

Thickness of the loess: 35 to 50 inches
Depth to bedrock: 40 to 55 inches

Ap or A horizon:
Hue—10YR
Value—4
Chroma—2 or 3
Texture—silt loam or silty clay loam

E horizon:
Hue—10YR
Value—4 or 5
Chroma—2 or 3
Texture—silt loam or silty clay loam

Bt horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 6
Texture—silty clay loam

2Bt horizon:
Hue—10YR, 2.5Y, or 5Y
Value—4 or 5
Chroma—2 to 4
Texture—silty clay loam, silty clay, or clay

2Cr horizon:
Kind of material—calcareous shale

547C2—Eleroy silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: Shoulders and backslopes

Map Unit Composition

Eleroy and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have till over the bedrock
- Soils that have less than 30 inches of loess on the surface

Properties and Qualities of the Eleroy Soil

Parent material: Loess over clayey residuum weathered from calcareous shale
Drainage class: Moderately well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Available water capacity: About 10.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest perched seasonal high water table: 2.0 feet, February through April
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

547D2—Eleroy silt loam, 10 to 18 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

Eleroy and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have till over the bedrock
- Soils that have less than 30 inches of loess on the surface

Properties and Qualities of the Eleroy Soil

Parent material: Loess over clayey residuum weathered from calcareous shale
Drainage class: Moderately well drained
Slowest permeability within a depth of 40 inches: Very slow
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Available water capacity: About 8.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest perched seasonal high water table: 2.0 feet, February through April
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Elizabeth Series

Taxonomic classification: Loamy-skeletal, mixed, superactive, mesic Lithic Hapludolls

Typical Pedon

Elizabeth silt loam, 7 to 15 percent slopes; 1,900 feet west and 560 feet south of the northeast corner of sec. 10, T. 27 N., R. 2 E.; Jo Daviess County, Illinois; USGS Hanover topographic quadrangle; lat. 42 degrees 21 minutes 17 seconds N. and long. 90 degrees 15 minutes 57 seconds W.

A1—0 to 6 inches; very dark gray (10YR 3/1) silt loam, gray (10YR 5/1) dry; moderate medium granular structure; friable; many fine and very fine roots; less than 10 percent limestone; slightly alkaline; clear smooth boundary.
A2—6 to 10 inches; very dark grayish brown (10YR 3/2) cobbly silt loam, grayish brown (10YR 5/2) dry; moderate medium subangular blocky structure parting to moderate medium granular; friable; many fine and very fine roots; 25 percent limestone; slightly effervescent; slightly alkaline; clear smooth boundary.
A3—10 to 19 inches; dark brown (10YR 3/3) extremely cobbly loam, brown (10YR 5/3) dry; moderate medium granular structure; friable; few fine and very fine roots; about 90 percent cobbles 3 to 6 inches in the smallest dimension; slightly effervescent; slightly alkaline; diffuse wavy boundary.
2R—19 inches; fractured dolomitic limestone bedrock; some dark silt loam in cracks in the upper few inches.

Range in Characteristics

Thickness of the solum and depth to dolomitic limestone: 10 to 20 inches

A horizon:
Hue—10YR

Value—2 or 3
Chroma—1 to 3
Texture—silt loam, loam, clay loam, or silty clay loam

2R horizon:
Kind of material—fractured dolomitic limestone

403E2—Elizabeth silt loam, 12 to 35 percent slopes, eroded

Setting

Landform: Stream terraces
Position on the landform: Backslopes

Map Unit Composition

Elizabeth and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have fractured bedrock at the surface
- Soils that are more than 20 inches deep to bedrock
- Soils that have more clay in the subsoil

Properties and Qualities of the Elizabeth Soil

Parent material: Loamy material over dolostone
Drainage class: Somewhat excessively drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow or moderately slow
Depth to restrictive feature: 7 to 20 inches to bedrock (lithic)
Available water capacity: About 2.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.5 to 5.0 percent
Shrink-swell potential: Moderate
Ponding: None
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 7s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Fayette Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Fayette silt loam (fig. 4), 10 to 18 percent slopes, eroded; 2,100 feet north and 1,700 feet west of the southeast corner of sec. 31, T. 12 N., R. 3 W.; Warren County, Illinois;



Figure 4.—A profile of a Fayette soil. These soils formed in loess under a cover of forestland vegetation.

USGS Rozetta topographic quadrangle; lat. 40 degrees 59 minutes 13 seconds N. and long. 90 degrees 46 minutes 18 seconds W., NAD 27:

Ap—0 to 5 inches; mixed dark grayish brown (10YR 4/2) and yellowish brown (10YR 5/4) silt loam, light brownish gray (10YR 6/2) dry; moderate medium granular structure; friable; common fine roots throughout; moderately acid; clear smooth boundary.

EB—5 to 9 inches; mixed brown (10YR 5/3) and yellowish brown (10YR 5/4) silt loam; weak medium platy structure parting to moderate fine subangular blocky; friable; common fine roots between peds; few faint dark yellowish brown (10YR 4/4) clay films on faces of peds; moderately acid; clear smooth boundary.

Bt1—9 to 13 inches; dark yellowish brown (10YR 4/4) silt loam; moderate fine and medium subangular blocky structure; friable; few fine roots between peds; common faint brown (10YR 4/3) clay films on faces of peds; moderately acid; clear smooth boundary.

Bt2—13 to 27 inches; yellowish brown (10YR 5/4) silty clay loam; moderate medium subangular blocky structure; friable; few fine roots between peds; common faint dark yellowish brown (10YR 4/4) clay films on faces of peds; moderately acid; gradual smooth boundary.

Bt3—27 to 38 inches; yellowish brown (10YR 5/4) silty clay loam; weak coarse prismatic structure parting to moderate medium subangular blocky; friable; common faint dark yellowish brown (10YR 4/4) clay films on faces of peds; common distinct light gray (10YR 7/2) (dry) clay depletions on faces of peds; few

prominent dark brown (7.5YR 3/2) accumulations of iron-manganese on faces of peds; moderately acid; gradual wavy boundary.

BC—38 to 55 inches; yellowish brown (10YR 5/4) silt loam; moderate medium and coarse subangular blocky structure; friable; common faint dark yellowish brown (10YR 4/4) clay films on faces of peds; common distinct light gray (10YR 7/2) (dry) clay depletions on faces of peds; few prominent dark brown (7.5YR 3/2) accumulations of iron-manganese on faces of peds; moderately acid; clear wavy boundary.

C—55 to 60 inches; yellowish brown (10YR 5/4) silt loam; massive; friable; few prominent dark brown (7.5YR 3/2) concretions of iron and manganese throughout the matrix; moderately acid.

Range in Characteristics

Thickness of the solum: 36 to 70 inches
Depth to free carbonates: More than 40 inches

Ap or A horizon:
Hue—10YR
Value—2 to 4
Chroma—1 to 3

E horizon (where present):
Value—3 to 5
Chroma—1 to 4

Bt horizon:
Hue—10YR
Value—4 or 5
Chroma—3 to 6

BC and C horizons:
Hue—10YR
Value—4 or 5
Chroma—4 to 6
Texture—silt loam or silty clay loam

280B—Fayette silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders and summits

Map Unit Composition

Fayette and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have a seasonal high water table within a depth of 6 feet
- Soils that contain less clay in the subsoil

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate

Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

280C—Fayette silt loam, 5 to 10 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders and summits

Map Unit Composition

Fayette and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have a seasonal high water table within a depth of 6 feet
- Soils that contain less clay in the subsoil
- Soils that contain loamy glacial till within a depth of 60 inches

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

280C2—Fayette silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Shoulders and backslopes

Map Unit Composition

Fayette and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have a seasonal high water table within a depth of 6 feet
- Soils that contain less clay in the subsoil
- Soils that contain loamy glacial till within a depth of 60 inches

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and high for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

280C3—Fayette silty clay loam, 5 to 10 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes and shoulders

Map Unit Composition

Fayette and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer

- Soils that have a seasonal high water table within a depth of 6 feet
- Soils that contain less clay in the subsoil
- Soils that contain loamy glacial till within a depth of 60 inches

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.2 to 1.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

280D2—Fayette silt loam, 10 to 18 percent slopes, eroded

Setting

Landform: Loess hills and ground moraines
Position on the landform: Shoulders and backslopes

Map Unit Composition

Fayette and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have a seasonal high water table within a depth of 6 feet
- Soils that contain less clay in the subsoil
- Soils that contain loamy glacial till within a depth of 60 inches

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None

Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

280D3—Fayette silty clay loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Ground moraines and loess hills
Position on the landform: Backslopes and shoulders

Map Unit Composition

Fayette and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have a seasonal high water table within a depth of 6 feet
- Soils that contain less clay in the subsoil
- Soils that contain loamy glacial till within a depth of 60 inches

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.2 to 1.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

280F2—Fayette silt loam, 18 to 35 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Fayette and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have a seasonal high water table within a depth of 6 feet
- Soils that contain less clay in the subsoil
- Soils that contain loamy glacial till within a depth of 60 inches
- Soils that are calcareous

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

280G2—Fayette silt loam, 35 to 60 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Fayette and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have a seasonal high water table within a depth of 6 feet
- Soils that contain less clay in the subsoil
- Soils that contain loamy glacial till within a depth of 60 inches

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 7e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

798C2—Fayette-Gale silt loams, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Fayette—shoulders and the upper backslopes; Gale—middle and lower backslopes

Map Unit Composition

Fayette and similar soils: 60 percent
Gale and similar soils: 40 percent

Minor Components

Similar soils:
- Soils that have slopes of more than 10 percent
- Soils that are underlain by limestone rather than sandstone

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.

Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Gale Soil

Parent material: Loess over residuum weathered from sandstone
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately slow
Permeability below a depth of 60 inches: Moderately slow
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Available water capacity: About 4.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Fayette—3e; Gale—3e
Prime farmland category: Not prime farmland
Hydric soil status: Fayette—not hydric; Gale—not hydric

Flagg Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Flagg silt loam, 2 to 5 percent slopes; 100 feet south and 1,790 feet west of the center of sec. 20, T. 27 N., R. 9 E.; Stephenson County, Illinois; USGS Ridott topographic quadrangle; lat. 42 degrees 19 minutes 25 seconds N. and long. 89 degrees 29 minutes 28 seconds W., NAD 83:

A—0 to 4 inches; very dark grayish brown (10YR 3/2) silt loam; moderate fine granular structure; friable; few wormcasts; moderately acid; clear smooth boundary.
E—4 to 11 inches; brown (10YR 4/3) silt loam; weak thin platy structure parting to moderate fine granular; friable; common wormcasts; strongly acid; clear smooth boundary.
BE—11 to 17 inches; brown (7.5YR 4/4) silty clay loam; moderate fine subangular blocky structure; firm; few clean silt grains on faces of peds; strongly acid; gradual smooth boundary.
Bt1—17 to 30 inches; brown (7.5YR 4/4) silty clay loam; moderate fine and medium subangular blocky structure; firm; common distinct dark brown (7.5YR 3/2) clay films on faces of peds; strongly acid; gradual smooth boundary.
Bt2—30 to 39 inches; brown (7.5YR 4/4) silty clay loam; moderate medium angular blocky structure; firm; common distinct dark brown (7.5YR 3/2) clay films on faces of peds; common small dark concretions of iron and manganese oxides; strongly acid; clear smooth boundary.

2Bt3—39 to 48 inches; brown (7.5YR 5/4) silty clay loam containing a component of sand; common coarse distinct strong brown (7.5YR 5/8) masses of iron oxides; moderate medium and coarse subangular blocky structure; firm; many distinct reddish brown (5YR 4/3) clay films on faces of peds; strongly acid; gradual smooth boundary.
2Bt4—48 to 72 inches; reddish brown (5YR 4/4) clay loam; moderate medium subangular blocky structure; firm; many faint dark reddish brown (5YR 3/4) clay films on faces of peds; strongly acid.

Range in Characteristics

Thickness of the loess: 30 to 50 inches
Thickness of the solum: More than 60 inches

Ap horizon:
Hue—10YR
Value—2 to 5
Chroma—2 or 3
Texture—silt loam

Bt horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 5
Texture—silty clay loam

2Bt horizon:
Hue—2.5YR, 5YR, or 7.5YR
Value—4 to 6
Chroma—4 to 6
Texture—silty clay loam, clay loam, sandy clay loam, or loam

419B—Flagg silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders and summits

Map Unit Composition

Flagg and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less clay in the upper part
- Soils that have a darker surface layer
- Soils that are underlain by bedrock within a depth of 60 inches

Properties and Qualities of the Flagg Soil

Parent material: Loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent

Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

419C2—Flagg silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Flagg and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less clay in the upper part
- Soils that have a darker surface layer
- Soils that are underlain by bedrock within a depth of 60 inches

Properties and Qualities of the Flagg Soil

Parent material: Loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.8 to 2.5 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

419D2—Flagg silt loam, 10 to 18 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Flagg and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less clay in the upper part
- Soils that have a darker surface layer
- Soils that are underlain by bedrock within a depth of 60 inches

Properties and Qualities of the Flagg Soil

Parent material: Loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.8 to 2.5 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

419D3—Flagg silty clay loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Flagg and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less clay in the upper part

- Soils that have a darker surface layer
- Soils that are underlain by bedrock within a depth of 60 inches

Properties and Qualities of the Flagg Soil

Parent material: Loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

3646L—Fluvaquents, loamy, 0 to 2 percent slopes, frequently flooded, long duration

Setting

Landform: Flood plains

Map Unit Composition

Fluvaquents and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have more sand
- Soils that have more clay

Dissimilar soils:
- The somewhat poorly drained Hoopeston soils on summits

Properties and Qualities of the Fluvaquents

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Moderate

Depth and months of the highest apparent seasonal high water table: At the surface all year
Deepest ponding: 0.2 foot all year
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 5w
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

Fox Series

Taxonomic classification: Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Fox silt loam, 6 to 12 percent slopes, eroded; 258 feet north and 111 feet east of the southwest corner of sec. 24, T. 46 N., R. 4 E.; Winnebago County, Illinois:

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) silt loam; moderate medium granular structure; friable; common distinct very dark brown (10YR 2/2) coatings on faces of peds; neutral; abrupt smooth boundary.
Bt1—8 to 15 inches; dark yellowish brown (10YR 4/4) clay loam; moderate fine subangular blocky structure; friable; few faint dark grayish brown (10YR 4/2) clay films on faces of peds; neutral; clear smooth boundary.
Bt2—15 to 18 inches; brown (10YR 4/3) clay loam; moderate fine and medium subangular blocky structure; friable; few faint dark grayish brown (10YR 4/2) clay films on faces of peds; neutral; clear smooth boundary.
Bt3—18 to 24 inches; brown (10YR 4/3) gravelly loam; moderate medium subangular blocky structure; friable; few faint brown (7.5YR 4/2) clay films on faces of peds; neutral; clear smooth boundary.
Bt4—24 to 28 inches; brown (10YR 4/3) gravelly sandy loam; weak medium subangular blocky structure; friable; few distinct brown (7.5YR 4/2) clay films on faces of peds; neutral; abrupt smooth boundary.
2C—28 to 60 inches; yellowish brown (10YR 5/4) gravelly coarse sand and gravelly sand; single grain; loose; 25 percent gravel; violently effervescent; moderately alkaline.

Range in Characteristics

Thickness of the loess or other silty material: Less than 24 inches
Depth to sandy and gravelly deposits: 20 to 40 inches
Depth to carbonates: 20 to 40 inches
Thickness of the solum: 20 to 40 inches

Ap or A horizon:
Hue—7.5YR or 10YR
Value—3 or 4
Chroma—2 or 3
Texture—loam, silt loam, or silty clay loam

Bt horizon:
Hue—7.5YR or 10YR
Value—3 or 4
Chroma—3 or 4
Texture—clay loam, loam, sandy clay loam, or sandy loam or the gravelly analogs of these textures
Content of gravel—less than 35 percent

2C horizon:
Hue—7.5YR or 10YR
Value—4 to 7
Chroma—3 or 4
Texture—the gravelly, very gravelly, or extremely gravelly analogs of sand or coarse sand
Content of gravel—15 to 70 percent

735D2—Casco-Rodman-Fox complex, 6 to 12 percent slopes, eroded

Setting

Landform: Stream terraces
Position on the landform: Backslopes

Map Unit Composition

Casco and similar soils: 35 percent
Rodman and similar soils: 31 percent
Fox and similar soils: 29 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less gravel and more sand or silt in the lower layers

Dissimilar soils:
- Soils underlain by till or limestone bedrock

Properties and Qualities of the Casco Soil

Parent material: Loamy alluvium over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 3.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Rodman Soil

Parent material: Sandy and gravelly glaciofluvial deposits
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 2.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Ponding: None
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion:

Properties and Qualities of the Fox Soil

Parent material: Loamy alluvium and/or thin layer of loess over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Casco—4e; Rodman—4s; Fox—3e
Prime farmland category: Not prime farmland
Hydric soil status: Casco—not hydric; Rodman—not hydric; Fox—not hydric

735E2—Casco-Rodman-Fox complex, 12 to 20 percent slopes, eroded

Setting

Landform: Stream terraces
Position on the landform: Backslopes

Map Unit Composition

Casco and similar soils: 35 percent

Rodman and similar soils: 31 percent
Fox and similar soils: 29 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less gravel and more sand or silt in the lower layers

Dissimilar soils:
- Soils underlain by till or limestone bedrock

Properties and Qualities of the Casco Soil

Parent material: Loamy alluvium over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 3.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Rodman Soil

Parent material: Sandy and gravelly glaciofluvial deposits
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 2.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Ponding: None
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion:

Properties and Qualities of the Fox Soil

Parent material: Loamy alluvium and/or thin layer of loess over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches

Available water capacity: About 7.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Casco—6e; Rodman—6s; Fox—4e
Prime farmland category: Not prime farmland
Hydric soil status: Casco—not hydric; Rodman—not hydric; Fox—not hydric

Gale Series

Taxonomic classification: Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Gale silt loam, in an area of Fayette-Gale complex, 5 to 10 percent slopes, eroded; 2,310 feet east and 2,490 feet north of the southwest corner of sec. 4, T. 24 N., R. 7 E.; Carroll County Illinois; USGS Brookville topographic quadrangle; lat. 42 degrees 06 minutes 15 seconds N. and long. 89 degrees 41 minutes 51 seconds W., NAD 27:

Ap—0 to 9 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; moderate medium granular structure; friable; slightly acid; abrupt smooth boundary.
BE—9 to 12 inches; brown (10YR 4/3) silt loam; weak fine subangular blocky structure; friable; common faint dark brown (10YR 3/3) organic coatings on faces of peds and in pore linings; slightly acid; clear wavy boundary.
Bt1—12 to 18 inches; brown (10YR 4/3) silt loam; moderate medium subangular blocky structure; friable; common faint dark brown (10YR 3/3) clay films on faces of peds; strongly acid; clear wavy boundary.
2Bt2—18 to 21 inches; dark yellowish brown (10YR 4/4) loam; weak medium subangular blocky structure; friable; common faint dark brown (10YR 3/3) clay films on faces of peds; strongly acid; clear wavy boundary.
3C—21 to 27 inches; strong brown (7.5YR 5/6) channery sand; about 20 percent sandstone channers; strongly acid.
3Cr—27 inches; strong brown (7.5YR 4/6) sandstone bedrock.

Range in Characteristics

Thickness of the loess mantle: 15 to 39 inches
Depth to sandy residuum: 15 to 39 inches
Depth to the paralithic contact with sandstone: 20 to 40 inches

Ap or A horizon(s);
Hue—10YR
Value—2 to 4
Chroma—1 to 3
Texture—silt loam

Bt horizon:
Hue—7.5YR or 10YR
Value—3 to 5
Chroma—4 to 6
Texture—silt loam or silty clay loam

2Bt horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—4 to 6
Texture—sandy loam, fine sandy loam, or loam or the channery analogs of these textures

3C horizon:
Hue—7.5YR or 10YR
Value—4 to 7
Chroma—3 to 8
Texture—sand, fine sand, channery sand, or channery fine sand

3Cr horizon:
Kind of material—sandstone

798C2—Fayette-Gale silt loams, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Fayette—shoulders and the upper backslopes; Gale—middle and lower backslopes

Map Unit Composition

Fayette and similar soils: 60 percent
Gale and similar soils: 40 percent

Minor Components

Similar soils:
- Soils that have slopes of more than 10 percent
- Soils that are underlain by limestone rather than sandstone

Properties and Qualities of the Fayette Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete

Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Gale Soil

Parent material: Loess over residuum weathered from sandstone
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately slow
Permeability below a depth of 60 inches: Moderately slow
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Available water capacity: About 4.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Fayette—3e; Gale—3e
Prime farmland category: Not prime farmland
Hydric soil status: Fayette—not hydric; Gale—not hydric

Gilford Series

Taxonomic classification: Coarse-loamy, mixed, superactive, mesic Typic Endoaquolls

Typical Pedon

Gilford fine sandy loam, 0 to 2 percent slopes; 1,840 feet north and 1,180 feet east of the southwest corner of sec. 14, T. 19 N., R. 4 E.; Whiteside County, Illinois; USGS Erie topographic quadrangle; lat. 41 degrees 37 minutes 55 seconds N. and long. 90 degrees 00 minutes 42 seconds W., NAD 27:

Ap—0 to 8 inches; black (10YR 2/1) fine sandy loam, very dark gray (10YR 3/1) dry; weak fine subangular blocky structure parting to weak fine granular; friable; slightly acid; abrupt smooth boundary.
A—8 to 18 inches; black (10YR 2/1) fine sandy loam, very dark gray (10YR 3/1) dry; weak medium subangular blocky structure parting to weak medium and fine granular; friable; neutral; clear smooth boundary.
BA—18 to 22 inches; dark grayish brown (2.5Y 4/2) sandy loam; weak medium and fine subangular blocky structure; very friable; many distinct very dark gray (10YR 3/1) organic coatings on faces of peds; few fine prominent yellowish brown (10YR 5/8) iron masses in the matrix; neutral; clear smooth boundary.
Bg—22 to 32 inches; grayish brown (2.5Y 5/2) sandy loam; weak medium subangular blocky structure; very friable; very dark gray (10YR 3/1) krotovina between depths of 29 and 32 inches; few fine prominent yellowish brown (10YR 5/8) iron masses in the matrix; neutral; abrupt wavy boundary.
2Cg—32 to 60 inches; light brownish gray (10YR 6/2) sand; single grain; loose; neutral.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches
Thickness of the solum: 20 to 40 inches

Ap or A horizon:
Hue—10YR or N
Value—2 or 3
Chroma—0 to 2
Texture—loam, sandy loam, or fine sandy loam or the mucky analogs of these textures

Bg horizon:
Hue—10YR, 2.5Y, or 5Y
Value—4 to 6
Chroma—1 or 2
Texture—fine sandy loam or sandy loam

2Cg horizon:
Hue—10YR or 2.5Y
Value—4 to 7
Chroma—1 to 3
Texture—loamy sand, sand, coarse sand, or fine sand

201A—Gilford fine sandy loam, 0 to 2 percent slopes

Setting

Landform: Outwash plains
Position on the landform: Toeslopes

Map Unit Composition

Gilford and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a dark surface layer more than 24 inches thick
- Soils that contain more clay or sand
- Soils that have a dark surface layer less than 10 inches thick
- Soils that do not have a seasonal high water table within a depth of 2 feet

Dissimilar soils:
- Soils along drainage ditches that are subject to rare flooding

Properties and Qualities of the Gilford Soil

Parent material: Loamy and/or sandy outwash
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May

Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

Greenbush Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Mollic Hapludalfs

Typical Pedon

Greenbush silt loam, 2 to 5 percent slopes; at an elevation of 700 feet; 1,430 feet west and 1,400 feet north of the southeast corner of sec. 18, T. 8 N., R. 1 W.; Warren County, Illinois; USGS Greenbush topographic quadrangle; lat. 40 degrees 40 minutes 40 seconds N. and long. 90 degrees 32 minutes 47 seconds W., NAD 27:

Ap—0 to 6 inches; very dark gray (10YR 3/1) silt loam, gray (10YR 5/1) dry; moderate fine granular structure; friable; slightly acid; abrupt smooth boundary.
E—6 to 10 inches; dark grayish brown (10YR 4/2) silt loam; weak thin platy structure; friable; common faint very dark gray (10YR 3/1) organic coatings on faces of peds; moderately acid; abrupt smooth boundary.
BE—10 to 17 inches; brown (10YR 4/3) silt loam; moderate medium platy structure parting to weak fine subangular blocky; friable; few distinct very dark gray (10YR 3/1) organic coatings and common distinct gray (10YR 6/1) (dry) silt coatings on faces of peds; moderately acid; clear smooth boundary.
Bt1—17 to 29 inches; yellowish brown (10YR 5/4) silty clay loam; weak medium prismatic structure parting to moderate fine and medium angular blocky; friable; common faint dark yellowish brown (10YR 4/4) clay films on faces of peds; common distinct gray (10YR 6/1) (dry) silt coatings on faces of peds; strongly acid; gradual smooth boundary.
Bt2—29 to 38 inches; brown (10YR 5/3) silty clay loam; weak medium prismatic structure parting to moderate fine angular blocky; friable; common faint brown (10YR 4/3) clay films on faces of peds; many faint light gray (10YR 7/2) (dry) silt coatings on faces of peds; common medium distinct yellowish brown (10YR 5/6) masses of iron in the matrix; common medium prominent light olive gray (5Y 6/2) iron depletions within peds; common prominent black (7.5YR 2.5/1) manganese oxide stains; strongly acid; gradual wavy boundary.
Bt3—38 to 53 inches; brown (10YR 5/3) silty clay loam; weak medium prismatic structure parting to moderate fine angular blocky; friable; common faint brown (10YR 4/3) clay films on faces of peds; many distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; common medium distinct yellowish brown (10YR 5/6) masses of iron in the matrix; common medium prominent light olive gray (5Y 6/2) iron depletions within peds; common prominent black (7.5YR 2.5/1) manganese oxide stains; strongly acid; gradual wavy boundary.
BCt—53 to 75 inches; brown (10YR 5/3) and light olive gray (5Y 6/2) silt loam; weak medium and coarse prismatic structure parting to weak fine and medium angular blocky; friable; few faint brown (10YR 4/3) clay films on faces of peds; few faint light gray (10YR 7/2) (dry) silt coatings on faces of peds; common medium distinct

yellowish brown (10YR 5/6) masses of iron within peds; common prominent black (7.5YR 2.5/1) manganese oxide stains; moderately acid; gradual wavy boundary.
C—75 to 100 inches; yellowish brown (10YR 5/4) and light olive gray (5Y 6/2) silt loam; massive; friable; many medium distinct light brownish gray (10YR 6/2) iron depletions within peds; many prominent black (7.5YR 2.5/1) manganese oxide stains; moderately acid.

Range in Characteristics

Depth to carbonates: More than 60 inches
Depth to the base of the argillic horizon: 36 to 70 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2

E horizon:
Hue—10YR
Value—3 to 5
Chroma—2 or 3

Bt horizon:
Hue—10YR
Value—4 or 5
Chroma—3 to 6
Texture—silty clay loam

C horizon:
Hue—10YR or 2.5Y
Value—4 to 6
Chroma—2 to 6
Texture—silt loam

675A—Greenbush silt loam, 0 to 2 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits

Map Unit Composition

Greenbush and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface layer
- Soils that have a lighter colored surface layer
- Soils that have a seasonal high water table at a depth of less than 4 feet or more than 6 feet
- Soils that contain less clay in the subsoil

Properties and Qualities of the Greenbush Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate

Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

675B—Greenbush silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders and summits

Map Unit Composition

Greenbush and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface layer
- Soils that have a lighter colored surface layer
- Soils that have a seasonal high water table at a depth of less than 4 feet or more than 6 feet
- Soils that contain less clay in the subsoil

Properties and Qualities of the Greenbush Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and high for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

675C—Greenbush silt loam, 5 to 10 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders and backslopes

Map Unit Composition

Greenbush and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface layer
- Soils that have a lighter colored surface layer
- Soils that have a seasonal high water table at a depth of less than 4 feet or more than 6 feet
- Soils that contain less clay in the subsoil

Properties and Qualities of the Greenbush Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: None assigned
Hydric soil status: Not hydric

675C2—Greenbush silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Shoulders and backslopes

Map Unit Composition

Greenbush and similar soils: 91 percent
Dissimilar soils: 9 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface layer
- Soils that have a lighter colored surface layer
- Soils that have a seasonal high water table at a depth of 2.0 to 3.5 feet
- Soils that do not have a seasonal high water table within a depth of 6 feet
- Soils that contain less clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Atterberry soils on summits
- The somewhat poorly drained Bunkum and Emery soils on backslopes and shoulders

Properties and Qualities of the Greenbush Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Hitt Series

Taxonomic classification: Fine-loamy, mixed, superactive, mesic Mollic Hapludalfs
Taxadjunct features: The Hitt soils in this survey area have a thinner dark surface layer than is defined as the range for the series.

Typical Pedon

Hitt silt loam, 2 to 5 percent slopes; 2,200 feet east and 2,200 feet south of the northwest corner of sec. 36, T. 27 N., R. 10 E.; Winnebago County, Illinois; USGS Pecatonica topographic quadrangle; lat. 42 degrees 17 minutes 53 seconds N. and long. 89 degrees 17 minutes 33 seconds W., NAD 83:

Ap—0 to 23 cm (0 to 9 inches); very dark brown (10YR 2/2) silt loam, dark grayish brown (10YR 4/2) dry; moderate fine granular structure; friable; many fine roots throughout; moderately acid; clear smooth boundary.
A—23 to 36 cm (9 to 14 inches); very dark brown (10YR 2/2) silt loam, brown (10YR 4/3) dry; moderate fine subangular blocky structure; friable; many fine roots throughout; slightly acid; clear smooth boundary.
Bt1—36 to 46 cm (14 to 18 inches); dark brown (7.5YR 3/3) silty clay loam; moderate medium subangular blocky structure; friable; common fine roots throughout; few distinct dark brown (7.5YR 3/2) clay films on all faces of peds; moderately acid; clear smooth boundary.
2Bt2—46 to 56 cm (18 to 22 inches); dark brown (7.5YR 3/4) clay loam; moderate medium subangular blocky structure; firm; common fine roots throughout; few distinct dark brown (7.5YR 3/2) clay films on all faces of peds; 5 percent nonflat subrounded mixed rock fragments 2 to 20 mm in diameter; strongly acid; clear smooth boundary.
2Bt3—56 to 69 cm (22 to 27 inches); brown (7.5YR 4/4) clay loam; moderate medium subangular blocky structure; firm; few fine roots throughout; common distinct dark reddish brown (5YR 3/2) clay films on all faces of peds; 5 percent nonflat subrounded mixed rock fragments 2 to 20 mm in diameter; moderately acid; gradual smooth boundary.
2Bt4—69 to 81 cm (27 to 32 inches); reddish brown (5YR 4/4) clay loam; moderate medium subangular blocky structure; firm; few fine roots throughout; few distinct dark reddish brown (5YR 3/2) clay films on all faces of peds; 5 percent nonflat subrounded mixed rock fragments 2 to 20 mm in diameter; moderately acid; clear smooth boundary.
2Bt5—81 to 104 cm (32 to 41 inches); reddish brown (5YR 4/4) clay loam; moderate coarse subangular blocky structure; firm; few fine roots throughout; few distinct dark reddish brown (5YR 3/2) clay films on all faces of peds; 2 percent nonflat subrounded mixed rock fragments 2 to 20 mm in diameter and 5 percent flat very angular limestone fragments 2 to 20 mm in diameter; moderately acid; abrupt smooth boundary.
3Bt6—104 to 114 cm (41 to 45 inches); reddish brown (2.5YR 4/4) clay; strong medium angular blocky structure; very firm; few fine roots between peds; few distinct dark reddish brown (5YR 3/3) clay films on all faces of peds; 5 percent flat very angular limestone fragments 2 to 20 mm in diameter; slightly acid; abrupt smooth boundary.
3Cr—114 cm (45 inches); broken limestone.

Range in Characteristics

Thickness of the mollic epipedon: 6 to 14 inches
Thickness of the solum: 40 to 60 inches
Thickness of the loess: 10 to 25 inches
Depth to limestone bedrock: 40 to 60 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—silt loam

Bt horizon:
Hue—10YR or 7.5YR
Value—3 to 5
Chroma—3 or 4
Texture—silty clay loam

2Bt horizon:
Hue—2.5YR, 5YR, or 7.5YR
Value—3 to 5
Chroma—3 to 5
Texture—sandy clay loam or clay loam

3Bt horizon:
Hue—2.5YR, 5YR, or 7.5YR
Value—3 or 4
Chroma—3 or 4
Texture—silty clay or clay with a variable content of chert

506C2—Hitt silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes and shoulders

Map Unit Composition

Hitt and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that contain more clay in the lower part of the subsoil within a depth of 40 inches
- Soils that are less than 40 inches or more than 60 inches deep to the underlying bedrock

Properties and Qualities of the Hitt Soil

Parent material: Loess over till over residuum weathered from limestone and dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 7.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 5.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

506C3—Hitt silty clay loam, 5 to 10 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes and shoulders

Map Unit Composition

Hitt and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that contain more clay in the lower part of the subsoil within a depth of 40 inches
- Soils that are less than 40 inches or more than 60 inches deep to the underlying bedrock

Properties and Qualities of the Hitt Soil

Parent material: Loess over till over residuum weathered from limestone and dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 6.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Hoopeston Series

Taxonomic classification: Coarse-loamy, mixed, superactive, mesic Aquic Hapludolls

Typical Pedon

Hoopeston sandy loam, 0 to 2 percent slopes; 2,530 feet south and 1,060 feet east of the northwest corner of sec. 14, T. 19 N., R. 4 E.; Whiteside County, Illinois; USGS Erie topographic quadrangle; lat. 41 degrees 38 minutes 04 seconds N. and long. 90 degrees 00 minutes 45 seconds W., NAD 27:

Ap—0 to 10 inches; black (10YR 2/1) sandy loam, dark gray (10YR 4/1) dry; weak fine subangular blocky structure parting to weak fine granular; very friable; common very fine roots throughout; neutral; clear smooth boundary.

A—10 to 14 inches; very dark grayish brown (10YR 3/2) sandy loam, grayish brown (10YR 5/2) dry; weak medium and fine subangular blocky structure; very friable; common very fine roots throughout; common faint very dark brown (10YR 2/2) organic coatings on faces of peds; neutral; clear smooth boundary.
Bw1—14 to 21 inches; brown (10YR 5/3) sandy loam; weak medium subangular blocky structure; very friable; few very fine roots between peds; few distinct very dark grayish brown (10YR 3/2) organic coatings on faces of peds and in root channels; common fine faint dark grayish brown (10YR 4/2) iron depletions and common fine distinct yellowish brown (10YR 5/6) iron masses in the matrix; neutral; clear smooth boundary.
Bw2—21 to 38 inches; brown (10YR 5/3) sandy loam; weak coarse subangular blocky structure; very friable; few very fine roots between peds; common fine faint grayish brown (10YR 5/2) iron depletions and common fine distinct yellowish brown (10YR 5/8) iron masses in the matrix; slightly acid; abrupt smooth boundary.
C—38 to 60 inches; pale brown (10YR 6/3) sand; single grain; loose; common fine faint light brownish gray (10YR 6/2) iron depletions and common fine prominent yellowish brown (10YR 5/8) iron masses in the matrix; neutral.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches
Depth to free carbonates: More than 40 inches
Thickness of the solum: 20 to 54 inches

Ap or A horizon:
Hue—7.5YR or 10YR
Value—2 or 3
Chroma—1 to 3
Texture—sandy loam, fine sandy loam, or loam

Bw, Bt, Bg, and/or Btg horizon:
Hue—7.5YR, 10YR, or 2.5Y
Value—4 to 6
Chroma—1 to 6
Texture—sandy loam or fine sandy loam; strata of loamy sand, loamy fine sand, loam, sandy clay loam, silt loam, or sand in some pedons

Cg and/or C horizon:
Hue—7.5YR to 5Y
Value—3 to 6
Chroma—1 to 8
Texture—loamy sand, sand, loamy fine sand, or fine sand; loamy strata in some pedons

172A—Hoopeston sandy loam, 0 to 2 percent slopes

Setting

Landform: Outwash plains
Position on the landform: Summits

Map Unit Composition

Hoopeston and similar soils: 92 percent
Dissimilar soils: 8 percent

Minor Components

Similar soils:
- Soils that have more sand or clay in the subsoil
- Soils that have a seasonal high water table at a depth of more than 3 feet

Dissimilar soils:
- The well drained Dickinson soils on summits and shoulders
- The very poorly drained Gilford soils in depressions

Properties and Qualities of the Hoopeston Soil

Parent material: Loamy and/or sandy outwash
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 2s
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Huntsville Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Cumulic Hapludolls

Typical Pedon

Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded; at an elevation of 623 feet; 2,475 feet east and 495 feet south of the northwest corner of sec. 1, T. 12 N., R. 4 E.; Knox County, Illinois; USGS La Fayette topographic quadrangle; lat. 41 degrees 03 minutes 37 seconds N. and long. 89 degrees 59 minutes 42 seconds W., NAD 27:

Ap—0 to 10 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; weak fine and medium subangular blocky structure; friable; slightly acid; clear smooth boundary.
A1—10 to 16 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; weak fine granular structure; friable; common faint very dark gray (10YR 3/1) organic coatings on faces of peds; neutral; clear smooth boundary.
A2—16 to 27 inches; dark brown (10YR 3/3) silt loam, brown (10YR 5/3) dry; weak fine granular structure; friable; common distinct very dark gray (10YR 3/1) organic coatings on faces of peds; neutral; clear smooth boundary.
AC—27 to 52 inches; brown (10YR 4/3) silt loam, pale brown (10YR 6/3) dry; weak medium subangular blocky structure; friable; common distinct very dark grayish

brown (10YR 3/2) organic coatings on faces of peds; neutral; clear smooth boundary.
C—52 to 60 inches; dark brown (10YR 3/3) silt loam; massive; friable; slightly acid.

Range in Characteristics

Thickness of the mollic epipedon: 24 to 57 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 to 3
Texture—silt loam

AC horizon:
Hue—10YR
Value—4 or 5
Chroma—3 or 4
Texture—silt loam or loam below a depth of 40 inches

C horizon:
Hue—10YR
Value—3 to 5
Chroma—3 or 4
Texture—silt loam or loam; strata of very fine sandy loam to fine sand below a depth of 40 inches in some pedons

8077A—Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded

Setting

Landform: Flood plains

Map Unit Composition

Huntsville and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that contain more sand
- Soils that have a dark surface soil less than 24 inches thick
- Soils that have a light-colored deposit of silt loam overwash
- Soils that have slopes of more than 2 percent

Dissimilar soils:
- The somewhat poorly drained Lawson soils in the slightly lower positions
- Soils in the slightly higher positions that are not subject to frequent flooding

Properties and Qualities of the Huntsville Soil

Parent material: Alluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 4.0 percent

Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Frequency and most likely period of flooding: Occasional, November through June
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Joy Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Aquic Hapludolls

Typical Pedon

Joy silt loam, 0 to 2 percent slopes; 1,900 feet east and 2,600 feet north of the southwest corner of sec. 26, T. 18 N., R. 3 E.; Henry County, Illinois; USGS Spring Hill topographic quadrangle; lat. 41 degrees 31 minutes 01 second N. and long. 90 degrees 06 minutes 59 seconds W., NAD 27:

Ap—0 to 5 inches; black (10YR 2/1) silt loam, dark grayish brown (10YR 4/2) dry; moderate medium granular structure; friable; moderately acid; abrupt smooth boundary.

A1—5 to 13 inches; very dark gray (10YR 3/1) silt loam, dark grayish brown (10YR 4/2) dry; weak fine subangular blocky structure parting to moderate medium granular; friable; slightly acid; clear smooth boundary.

A2—13 to 17 inches; very dark grayish brown (10YR 3/2) silt loam; moderate fine subangular blocky structure parting to moderate medium granular; friable; neutral; clear smooth boundary.

Bt1—17 to 21 inches; brown (10YR 4/3) silt loam; moderate medium and fine subangular blocky structure; friable; common faint dark grayish brown (10YR 4/2) clay films on faces of peds; neutral; clear smooth boundary.

Bt2—21 to 27 inches; mixed grayish brown (10YR 5/2) and brown (10YR 5/3) silty clay loam; moderate medium and fine subangular blocky structure; friable; common faint dark grayish brown (10YR 4/2) clay films on faces of peds; few prominent black (7.5YR 2.5/1) coatings of iron-manganese on faces of peds; common medium distinct yellowish brown (10YR 5/6) iron masses in the matrix; neutral; clear smooth boundary.

Bt3—27 to 34 inches; yellowish brown (10YR 5/4) silt loam; moderate fine and medium subangular blocky structure; friable; common faint brown (10YR 5/3) clay films on faces of peds; few prominent black (7.5YR 2.5/1) coatings of iron-manganese on faces of peds; common fine distinct light brownish gray (10YR 6/2) iron depletions and yellowish brown (10YR 5/6) iron masses in the matrix; neutral; clear smooth boundary.

Btg—34 to 49 inches; mixed light brownish gray (2.5Y 6/2) and yellowish brown (10YR 5/6) silt loam; weak fine prismatic structure parting to weak fine and medium subangular blocky; friable; few faint grayish brown (10YR 5/2) clay films on faces of peds; few prominent black (7.5YR 2.5/1) coatings of iron-manganese on faces of peds; neutral; gradual smooth boundary.

Cg—49 to 60 inches; light brownish gray (2.5Y 6/2) silt loam; massive; friable; common prominent black (7.5YR 2.5/1) coatings of iron-manganese along cleavage planes; many medium prominent yellowish brown (10YR 5/6) iron masses in the matrix; neutral.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches
Depth to free carbonates: More than 40 inches
Thickness of the solum: 36 to 60 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 to 3
Texture—silt loam

Bw, Bg, or Bt horizon:
Hue—7.5YR, 10YR, or 2.5Y
Value—4 to 6
Chroma—2 to 6
Texture—silt loam or silty clay loam

C or Cg horizon:
Hue—10YR, 2.5Y, or 5Y
Value—4 to 7
Chroma—1 to 4
Texture—silt loam, very fine sandy loam, or loam

275A—Joy silt loam, 0 to 2 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits

Map Unit Composition

Joy and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less silt and more sand in the substratum
- Soils that have a dark surface soil more than 24 inches or less than 10 inches thick
- Soils that do not have a seasonal high water table within a depth of 4 feet

Dissimilar soils:
- The well drained Port Byron soils on summits and shoulders
- The poorly drained Sable soils on toeslopes

Properties and Qualities of the Joy Soil

Parent material: Loess
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.9 inches to a depth of 60 inches

Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

275B—Joy silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits

Map Unit Composition

Joy and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less silt and more sand in the substratum
- Soils that have a dark surface soil more than 24 inches or less than 10 inches thick
- Soils that do not have a seasonal high water table within a depth of 4 feet

Dissimilar soils:
- The well drained Port Byron soils on summits and shoulders
- The poorly drained Sable soils on toeslopes

Properties and Qualities of the Joy Soil

Parent material: Loess
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Keltner Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Oxyaquic Argiudolls

Typical Pedon

Keltner silt loam, 2 to 5 percent slopes; 380 feet east and 240 feet north of the center of sec. 32, T. 26 N., R. 7 E.; Stephenson County, Illinois; USGS Shannon topographic quadrangle; lat. 42 degrees 12 minutes 23 seconds N. and long. 89 degrees 42 minutes 59 seconds W., NAD 27:

Ap—0 to 8 inches; black (10YR 2/1) silt loam, very dark gray (10YR 3/1) dry; moderate medium granular structure; friable; light gray (10YR 7/2) (dry) silt coatings; neutral; abrupt smooth boundary.

A—8 to 13 inches; very dark grayish brown (10YR 3/2) silt loam, dark grayish brown (10YR 4/2) dry; weak fine granular structure; friable; moderately acid; clear smooth boundary.

Bt1—13 to 20 inches; dark yellowish brown (10YR 4/4) silty clay loam; weak fine subangular blocky structure; firm; common distinct brown (10YR 4/3) clay films on faces of peds; moderately acid; clear smooth boundary.

Bt2—20 to 27 inches; yellowish brown (10YR 5/4) silty clay loam; moderate fine and medium subangular blocky structure; firm; common distinct brown (10YR 4/3) clay films on faces of peds; many medium distinct light olive brown (2.5Y 5/4) and few fine distinct yellowish brown (10YR 5/8) masses of iron in the matrix; moderately acid; clear smooth boundary.

Bt3—27 to 38 inches; dark grayish brown (10YR 4/2) silty clay loam; moderate medium subangular blocky structure; firm; many distinct grayish brown (10YR 5/2) clay films on faces of peds; many dark brown (7.5YR 3/2) concretions of iron and manganese oxides; many medium distinct yellowish brown (10YR 5/8) masses of iron and grayish brown (2.5Y 5/2) iron depletions in the matrix; moderately acid; abrupt smooth boundary.

2Bt4—38 to 41 inches; mixed light olive brown (2.5Y 5/4), greenish gray (5G 6/1), and yellowish brown (10YR 5/8) clay; moderate medium and coarse angular blocky structure; very firm; few faint olive gray (5Y 5/2) clay films on faces of peds; neutral; gradual smooth boundary.

2Cr—41 to 60 inches; mixed olive (5Y 5/3), greenish gray (5BG 6/1), and yellowish brown (10YR 5/8), thinly bedded clayey shale containing many fragments of limestone in discontinuous layers ranging from 1 to 3 inches in thickness; horizontal cleavage planes with light greenish gray (5G 7/1) fillings and coatings; slightly effervescent; moderately alkaline.

Range in Characteristics

Thickness of the loess: 30 to 50 inches
Thickness of the mollic epipedon: 10 to 24 inches
Thickness of the solum: 40 to 50 inches
Depth to clayey, calcareous shale bedrock: 40 to 60 inches

A horizon:
Hue—10YR
Value—2 or 3

Chroma—1 or 2
Texture—silt loam; silty clay loam in pedons in eroded areas

Bt horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—2 to 6

2Bt horizon:
Hue—10YR, 2.5Y, or 5Y
Value—4 to 6
Chroma—2 to 6
Texture—silty clay loam, silty clay, or clay

2Cr horizon:
Hue—10YR, 2.5Y, 5Y, 5GY, 5G, 5BG, or N
Value—4 to 6
Chroma—0 to 4
Texture—clay or silty clay

546C2—Keltner silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Valley sides
Position on the landform: Backslopes

Map Unit Composition

Keltner and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that are underlain by shale bedrock within a depth of 40 inches
- Soils that have till above the bedrock

Properties and Qualities of the Keltner Soil

Parent material: Loess over residuum weathered from shale
Drainage class: Moderately well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Available water capacity: About 7.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 4.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest perched seasonal high water table: 2.0 feet, February through April
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Lacrescent Series

Taxonomic classification: Loamy-skeletal, mixed, superactive, mesic Typic Hapludolls

Typical Pedon

Lacrescent cobbly loam, 25 to 60 percent slopes; 1,980 feet east and 700 feet north of the southwest corner of sec. 5, T. 22 N., R. 4 E.; Whiteside County, Illinois; USGS Thomson topographic quadrangle; lat. 41 degrees 55 minutes 07 seconds N. and long. 90 degrees 04 minutes 03 seconds W., NAD 27:

A1—0 to 5 inches; very dark grayish brown (10YR 3/2) cobbly loam, dark grayish brown (10YR 4/2) dry; weak fine granular structure; very friable; few fine roots throughout; about 15 percent cobblestones and pebbles; slightly effervescent; slightly alkaline; clear smooth boundary.

A2—5 to 12 inches; dark brown (10YR 3/3) cobbly loam, brown (10YR 5/3) dry; weak medium and fine granular structure; very friable; few fine roots throughout; about 15 percent cobblestones and pebbles; violently effervescent; slightly alkaline; clear smooth boundary.

Bw—12 to 36 inches; brown (10YR 4/3) very cobbly loam; weak fine subangular blocky structure parting to weak fine granular; very friable; few fine roots between peds; few faint very dark grayish brown (10YR 3/2) organic coatings in root channels; about 40 percent cobblestones and pebbles; violently effervescent; slightly alkaline; clear smooth boundary.

C—36 to 60 inches; yellowish brown (10YR 5/4) very cobbly loam; massive; very friable; about 60 percent cobblestones and pebbles; violently effervescent; slightly alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 18 inches
Depth to free carbonates: 20 to 36 inches
Thickness of the solum: 20 to 36 inches
Depth to limestone bedrock: 3.5 to 10 feet

A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 to 3
Texture—silt loam, loam, or cobbly loam

Bw horizon:
Hue—10YR
Value—4
Chroma—3 or 4
Texture—very cobbly fine sandy loam or very cobbly loam

C horizon:
Hue—10YR or 2.5Y
Value—4 or 5
Chroma—3 or 4
Texture—very cobbly loam or very cobbly fine sandy loam

785G—Lacrescent cobbly loam, 25 to 60 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Lacrescent and similar soils: 85 percent
Dissimilar soils: 15 percent

Minor Components

Similar soils:
- Soils that have slopes of less than 25 percent
- Soils that have a surface layer of channery loam

Dissimilar soils:
- The well drained Lamont, Seaton, and Timula soils on summits and shoulders

Properties and Qualities of the Lacrescent Soil

Parent material: Colluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 5.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 5.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 7e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Lamoille Series

Taxonomic classification: Fine, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Lamoille silt loam, in an area of NewGlarus-Lamoille silt loams, 15 to 35 percent slopes; 900 feet west and 50 feet south of the northeast corner of sec. 31, T. 28 N., R. 2 E.; Jo Daviess County, Illinois; USGS Scales Mound West quadrangle; lat. 42 degrees 23 minutes 11 seconds N. and long. 90 degrees 19 minutes 31 seconds W., NAD 83:

A—0 to 6 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; moderate medium and fine granular structure; friable; common fine and

very fine roots; fragments of brown (10YR 5/3) subsoil material in the lower part; neutral; clear smooth boundary.

E—6 to 10 inches; brown (10YR 5/3) silt loam, very pale brown (10YR 7/3) dry; weak medium platy structure; friable; few fine and very fine roots; about 2 percent dolomite fragments of cobble size; slightly acid; clear smooth boundary.

Bt1—10 to 16 inches; yellowish brown (10YR 5/4) silty clay loam; moderate medium and fine subangular blocky structure; friable; few fine and very fine roots; common distinct brown (10YR 4/3) clay films on faces of peds; about 2 percent chert fragments of gravel size; slightly acid; gradual smooth boundary.

2Bt2—16 to 24 inches; strong brown (7.5YR 5/6) gravelly silty clay; strong medium and fine angular blocky structure; firm; few fine and very fine roots; many distinct brown (10YR 4/3) clay films on faces of peds; about 20 percent angular chert and dolomite fragments of gravel size; neutral; clear wavy boundary.

2Bt3—24 to 38 inches; strong brown (7.5YR 5/6) cobbly silty clay; moderate medium subangular blocky structure; firm; few fine roots; many distinct dark grayish brown (10YR 4/2) clay films on faces of peds; about 35 percent dolomite fragments of cobble and gravel size; neutral; gradual wavy boundary.

3Bt4—38 to 60 inches; light yellowish brown (10YR 6/4) very cobbly loam; moderate medium and fine subangular blocky structure; friable; few fine roots; few distinct brown (10YR 4/3) clay films on faces of peds; about 50 percent dolomite fragments of cobble and gravel size; strongly effervescent; moderately alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches
Thickness of the loess: 5 to 15 inches
Thickness of the residuum: 10 to 30 inches
Thickness of the solum: 35 to more than 60 inches

Ap or AB horizon:
- Hue—10YR
- Value—3 or 4
- Chroma—1 to 2
- Texture—silt loam

Bt horizon:
- Hue—10YR
- Value—4 or 5
- Chroma—3 or 4
- Texture—silty clay loam or silt loam

2Bt horizon:
- Hue—5YR or 7.5YR
- Value—4 to 6
- Chroma—4 to 6
- Texture—silty clay loam, clay, or clay loam with 35 to 75 percent clay in the fine-earth fraction

3Bt horizon:
- Hue—10YR or 2.5Y
- Value—3 to 5
- Chroma—4 to 6
- Texture—loam or sandy loam in the fine-earth fraction

905F—NewGlarus-Lamoille silt loams, 18 to 35 percent slopes

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

NewGlarus and similar soils: 55 percent
Lamoille and similar soils: 45 percent

Minor Components

Similar soils:
- Soils that have bedrock within a depth of 60 inches

Properties and Qualities of the NewGlarus Soil

Parent material: Loess over clayey pedisediment over loamy residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Available water capacity: About 5.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamoille Soil

Parent material: Thin mantle of loess over clayey residuum over loamy-skeletal colluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Moderately slow
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: NewGlarus—6e; Lamoille—6e
Prime farmland category: Not prime farmland
Hydric soil status: NewGlarus—not hydric; Lamoille—not hydric

905G—NewGlarus-Lamoille silt loams, 35 to 60 percent slopes

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

NewGlarus and similar soils: 55 percent
Lamoille and similar soils: 45 percent

Minor Components

Similar soils:
- Soils that have bedrock at a depth of 40 to 60 inches

Properties and Qualities of the NewGlarus Soil

Parent material: Loess over clayey pedisediment over loamy residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Available water capacity: About 5.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamoille Soil

Parent material: Thin mantle of loess over clayey residuum over loamy-skeletal colluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Moderately slow
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: NewGlarus—6e; Lamoille—6e
Prime farmland category: Not prime farmland
Hydric soil status: NewGlarus—not hydric; Lamoille—not hydric

Lamont Series

Taxonomic classification: Coarse-loamy, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Lamont fine sandy loam, 2 to 5 percent slopes; 2,180 feet north and 1,460 feet east of the southwest corner of sec. 14, T. 18 N., R. 7 E.; Bureau County, Illinois; USGS New Bedford topographic quadrangle; lat. 41 degrees 32 minutes 48 seconds N. and long. 89 degrees 39 minutes 42 seconds W., NAD 27:

Ap—0 to 9 inches; mixed dark grayish brown (10YR 4/2) and yellowish brown (10YR 5/4) fine sandy loam, yellowish brown (10YR 5/4) dry; moderate fine granular structure; very friable; few very fine roots throughout; slightly acid; abrupt smooth boundary.

Bt1—9 to 13 inches; yellowish brown (10YR 5/4) fine sandy loam; weak medium subangular blocky structure; very friable; few very fine roots between peds; few faint dark yellowish brown (10YR 4/4) clay films on faces of peds; neutral; clear smooth boundary.

Bt2—13 to 20 inches; yellowish brown (10YR 5/4) fine sandy loam; moderate medium subangular blocky structure; very friable; few very fine roots between peds; common faint dark yellowish brown (10YR 4/4) clay films on faces of peds; moderately acid; clear smooth boundary.

Bt3—20 to 29 inches; yellowish brown (10YR 5/4) fine sandy loam; moderate medium subangular blocky structure; very friable; few fine roots between peds; many prominent brown (7.5YR 4/4) clay films on faces of peds; moderately acid; clear smooth boundary.

BC—29 to 39 inches; yellowish brown (10YR 5/4) loamy fine sand with several thin lamellae of brown (7.5YR 4/4) loamy fine sand; weak coarse subangular blocky structure; very friable; strongly acid; clear smooth boundary.

E and Bt—39 to 60 inches; yellowish brown (10YR 5/4) fine sand (E part); single grain; loose; thin brown (7.5YR 4/4) loamy fine sand lamellae about 1/2 to 1 inch thick at depths of 43 and 53 inches and fine sandy loam lamellae at a depth of 59 inches (Bt part); weak fine subangular blocky structure; very friable; slightly acid.

Range in Characteristics

Thickness of the solum: 30 to more than 60 inches

Ap or A horizon:
- Hue—10YR
- Value—3 or 4
- Chroma—1 or 2
- Texture—fine sandy loam, sandy loam, or loam

Bt horizon:
- Hue—10YR
- Value—4 or 5
- Chroma—3 or 4
- Texture—sandy clay loam, loam, or fine sandy loam

E and Bt horizon:
- Hue—7.5YR or 10YR
- Value—4 to 6
- Chroma—3 to 6
- Texture—fine sandy loam, loamy sand, sand, loamy fine sand, or fine sand

175B—Lamont fine sandy loam, 2 to 5 percent slopes

Setting

Landform: Dunes
Position on the landform: Summits and shoulders

Map Unit Composition

Lamont and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have less clay and more sand in the subsoil
- Soils that have silt loam in the surface layer and the upper part of the subsoil

Dissimilar soils:
- The somewhat poorly drained Hoopeston soils on footslopes

Properties and Qualities of the Lamont Soil

Parent material: Eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

175C2—Lamont fine sandy loam, 5 to 10 percent slopes, eroded

Setting

Landform: Dunes
Position on the landform: Shoulders and backslopes

Map Unit Composition

Lamont and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have less clay and more sand in the subsoil
- Soils that have silt loam in the surface layer and the upper part of the subsoil

Dissimilar soils:
- The somewhat poorly drained Hoopeston soils on footslopes

Properties and Qualities of the Lamont Soil

Parent material: Eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

175D2—Lamont fine sandy loam, 10 to 18 percent slopes, eroded

Setting

Landform: Dunes
Position on the landform: Backslopes

Map Unit Composition

Lamont and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have less clay and more sand in the subsoil
- Soils that have silt loam in the surface layer and the upper part of the subsoil

Dissimilar soils:
- The somewhat poorly drained Hoopeston soils on footslopes

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

175D3—Lamont fine sandy loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Dunes
Position on the landform: Backslopes

Map Unit Composition

Lamont and similar soils: 99 percent
Dissimilar soils: 1 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have less clay and more sand in the subsoil
- Soils that have silt loam in the surface layer and the upper part of the subsoil

Dissimilar soils:
- The somewhat poorly drained Hoopeston soils on footslopes

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.2 to 0.8 percent
Shrink-swell potential: Low

Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: High
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

175F2—Lamont fine sandy loam, 18 to 35 percent slopes, eroded

Setting

Landform: Dunes
Position on the landform: Backslopes

Map Unit Composition

Lamont and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that have less clay and more sand in the subsoil
- Soils that have silt loam in the surface layer and the upper part of the subsoil
- Soils that are calcareous

Dissimilar soils:
- The somewhat poorly drained Hoopeston soils on footslopes

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: 7e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

952C2—Tell-Lamont complex, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Summits and shoulders

Map Unit Composition

Tell and similar soils: 46 percent
Lamont and similar soils: 44 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that have more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.9 inches to a depth of 60 inches

Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: Tell—3e; Lamont—3e
Prime farmland category: Not prime farmland
Hydric soil status: Tell—not hydric; Lamont—not hydric

952D2—Tell-Lamont complex, 10 to 18 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Tell and similar soils: 46 percent
Lamont and similar soils: 44 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that have more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium

Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: Tell—3e; Lamont—4e
Prime farmland category: Not prime farmland
Hydric soil status: Tell—not hydric; Lamont—not hydric

952D3—Tell-Lamont complex, 10 to 18 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Tell and similar soils: 46 percent
Lamont and similar soils: 44 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that have more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.5 inches to a depth of 60 inches

Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: High
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: Tell—4e; Lamont—6e
Prime farmland category: Not prime farmland
Hydric soil status: Tell—not hydric; Lamont—not hydric

952F2—Tell-Lamont complex, 18 to 35 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Tell and similar soils: 46 percent
Lamont and similar soils: 44 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that have more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes
- Soils that are calcareous

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: Tell—6e; Lamont—7e
Prime farmland category: Not prime farmland
Hydric soil status: Tell—not hydric; Lamont—not hydric

Lawson Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Aquic Cumulic Hapludolls

Typical Pedon

Lawson silt loam, 0 to 2 percent slopes, occasionally flooded; 318 feet south and 1,040 feet east of the northwest corner of sec. 17, T. 17 N., R. 9 E.; Bureau County, Illinois; USGS Princeton North topographic quadrangle; lat. 41 degrees 27 minutes 54 seconds N. and long. 89 degrees 29 minutes 14 seconds W., NAD 27:

Ap—0 to 11 inches; very dark grayish brown (10YR 3/2) silt loam, dark grayish brown (10YR 4/2) dry; weak medium granular structure; friable; few fine roots throughout; neutral; clear smooth boundary.
A1—11 to 19 inches; black (10YR 2/1) silt loam, very dark gray (10YR 3/1) dry; moderate fine granular structure; friable; few fine roots throughout; neutral; gradual smooth boundary.
A2—19 to 28 inches; very dark grayish brown (10YR 3/2) silt loam, dark grayish brown (10YR 4/2) dry; moderate medium granular structure; friable; few fine roots throughout; neutral; gradual smooth boundary.
C1—28 to 50 inches; dark grayish brown (10YR 4/2) silt loam; weak medium subangular blocky structure; friable; few fine roots throughout; common faint very dark grayish brown (10YR 3/2) organic coatings on faces of peds; very dark grayish brown (10YR 3/2) krotovina; few fine faint brown (10YR 4/3) and common fine distinct yellowish brown (10YR 5/6) iron masses in the matrix; neutral; gradual smooth boundary.
C2—50 to 60 inches; grayish brown (2.5Y 5/2) silt loam; weak medium subangular blocky structure; friable; few fine roots; very dark grayish brown (10YR 3/2) krotovina; common fine prominent dark grayish brown (10YR 4/2) iron depletions and common fine prominent yellowish brown (10YR 5/6) iron masses in the matrix; neutral.

Range in Characteristics

Thickness of the mollic epipedon: 24 to 36 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—silt loam

C horizon:
Hue—10YR or 2.5Y
Value—3 to 6
Chroma—1 to 3
Texture—silt loam

1451A—Lawson silt loam, undrained, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Lawson and similar soils: 92 percent
Dissimilar soils: 8 percent

Minor Components

Similar soils:
- Soils that have a dark surface soil less than 24 inches thick
- Soils that have a light-colored deposit of silt loam overwash
- Soils that have a buried horizon within a depth of 60 inches
- Soils that contain more sand in the surface layer

Dissimilar soils:
- The poorly drained Otter soils in the slightly lower positions on flood plains
- The well drained Huntsville soils in the slightly higher positions on flood plains

Properties and Qualities of the Lawson Soil

Parent material: Alluvium
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 1.0 foot, November through May
Ponding: None
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 5w
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

3451A—Lawson silt loam, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Lawson and similar soils: 92 percent
Dissimilar soils: 8 percent

Minor Components

Similar soils:
- Soils that have a dark surface soil less than 24 inches thick
- Soils that have a light-colored deposit of silt loam overwash
- Soils that have a buried horizon within a depth of 60 inches
- Soils that contain more sand in the surface layer

Dissimilar soils:
- The poorly drained Otter soils in the slightly lower positions on flood plains
- The well drained Huntsville soils in the slightly higher positions on flood plains

Properties and Qualities of the Lawson Soil

Parent material: Alluvium
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate

Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3w
Prime farmland category: Prime farmland where protected from flooding or not frequently flooded during the growing season
Hydric soil status: Not hydric

7451A—Lawson silt loam, 0 to 2 percent slopes, rarely flooded

Setting

Landform: Flood plains

Map Unit Composition

Lawson and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a dark surface soil less than 24 inches thick
- Soils that have a light-colored deposit of silt loam overwash
- Soils that have a buried horizon within a depth of 60 inches
- Soils that contain more sand in the surface soil

Dissimilar soils:
- The poorly drained Otter soils in the slightly lower positions on flood plains
- The well drained Huntsville soils in the slightly higher positions on flood plains

Properties and Qualities of the Lawson Soil

Parent material: Alluvium
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 7.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May

Frequency and most likely period of flooding: Rare, November through June
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Littleton Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Aquic Cumulic Hapludolls

Typical Pedon

Littleton silt loam, 0 to 2 percent slopes; 200 feet north and 1,420 feet east of the southwest corner of sec. 16, T. 20 N., R. 4 E.; Whiteside County, Illinois; USGS Erie topographic quadrangle; lat. 41 degrees 42 minutes 52 seconds N. and long. 90 degrees 02 minutes 57 seconds W., NAD 27:

Ap—0 to 8 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; moderate fine subangular blocky structure parting to moderate fine granular; friable; few very fine roots throughout; slightly acid; clear smooth boundary.

A1—8 to 20 inches; very dark gray (10YR 3/1) silt loam, dark gray (10YR 4/1) dry; moderate fine and very fine subangular blocky structure parting to moderate fine granular; friable; few fine roots throughout; few very thin strata of brown (10YR 5/3) silt loam; slightly acid; clear smooth boundary.

A2—20 to 36 inches; black (10YR 2/1) silt loam, dark gray (10YR 4/1) dry; moderate fine and very fine subangular blocky structure; friable; few fine roots between peds; slightly acid; gradual smooth boundary.

BA—36 to 52 inches; brown (10YR 5/3) silt loam; moderate medium subangular blocky structure; friable; many faint grayish brown (10YR 5/2) coatings on faces of peds and root channels; common distinct very dark gray (10YR 3/1) organic coatings on faces of peds; few fine distinct yellowish brown (10YR 5/6) iron masses in the matrix; neutral; clear smooth boundary.

Bg—52 to 61 inches; grayish brown (10YR 5/2) silty clay loam; strong medium prismatic structure; friable; many faint grayish brown (10YR 5/2) coatings on faces of peds; common medium distinct yellowish brown (10YR 5/6) iron masses in the matrix; few faint black (N 2.5/) iron-manganese concretions throughout; neutral; clear smooth boundary.

Cg—61 to 80 inches; grayish brown (10YR 5/2) silt loam; massive; friable; common medium distinct yellowish brown (10YR 5/6) iron masses in the matrix; few faint black (N 2.5/) iron-manganese concretions throughout; neutral.

Range in Characteristics

Thickness of the mollic epipedon: 24 to 36 inches
Thickness of the solum: 30 to 62 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3

Chroma—1 to 3
Texture—silt loam

Bg horizon:
Hue—10YR or 2.5Y
Value—3 to 5
Chroma—2 or 3
Texture—silt loam or silty clay loam

Cg horizon:
Hue—10YR, 2.5Y, or 5Y
Value—4 to 6
Chroma—1 to 4
Texture—silt loam; thin strata of silty clay loam in some pedons

81A—Littleton silt loam, 0 to 2 percent slopes

Setting

Landform: Alluvial fans and stream terraces
Position on the landform: Summits and footslopes

Map Unit Composition

Littleton and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that contain more sand
- Soils that do not have a seasonal high water table within a depth of 3 feet
- Soils that have slopes of more than 2 percent

Dissimilar soils:
- The somewhat poorly drained Lawson soils that are subject to flooding; in the lower positions

Properties and Qualities of the Littleton Soil

Parent material: Alluvium
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 4.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1

Prime farmland category: Prime farmland
Hydric soil status: Not hydric

81B—Littleton silt loam, 2 to 5 percent slopes

Setting

Landform: Stream terraces and alluvial fans
Position on the landform: Summits and footslopes

Map Unit Composition

Littleton and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that contain more sand
- Soils that do not have a seasonal high water table within a depth of 3 feet
- Soils that have slopes of less than 2 percent

Dissimilar soils:
- The somewhat poorly drained Lawson soils that are subject to flooding; in the lower positions

Properties and Qualities of the Littleton Soil

Parent material: Alluvium
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 4.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Loran Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Aquollic Hapludalfs
Taxadjunct features: The Loran soils in this survey area have a thinner dark surface layer than is defined as the range for the series.

Typical Pedon

Loran silt loam, 2 to 5 percent slopes; 1,290 feet west and 620 feet south of the center of sec. 34, T. 26 N., R. 8 E.; Stephenson County, Illinois; USGS Forreston North topographic quadrangle; lat. 42 degrees 12 minutes 23 seconds N. and long. 89 degrees 33 minutes 58 seconds W., NAD 27:

Ap—0 to 6 inches; black (10YR 2/1) silt loam, very dark gray (10YR 3/1) dry; moderate medium granular structure; friable; neutral; abrupt smooth boundary.

A—6 to 13 inches; black (10YR 2/1) silt loam, very dark gray (10YR 3/1) dry; moderate medium granular structure; friable; neutral; clear smooth boundary.

Bt1—13 to 17 inches; very dark grayish brown (10YR 3/2) silty clay loam, grayish brown (10YR 5/2) dry; moderate fine and medium subangular blocky structure; firm; few distinct very dark gray (10YR 3/1) organo-clay films on faces of peds; neutral; clear smooth boundary.

Bt2—17 to 21 inches; dark grayish brown (10YR 4/2) silty clay loam; moderate fine and medium subangular blocky structure; firm; common distinct very dark grayish brown (10YR 3/2) organo-clay films on faces of peds; few fine faint dark yellowish brown (10YR 4/4) masses of iron; many prominent black (10YR 2/1) concretions of iron and manganese throughout; neutral; clear smooth boundary.

Btg1—21 to 29 inches; dark grayish brown (2.5Y 4/2) and grayish brown (2.5Y 5/2) silty clay loam; weak moderate prismatic structure parting to moderate fine and medium subangular blocky; firm; common distinct dark gray (10YR 4/1) clay films on faces of peds; few fine distinct yellowish brown (10YR 5/6) masses of iron; many prominent black (10YR 2/1) concretions of iron and manganese throughout; neutral; clear smooth boundary.

Btg2—29 to 38 inches; grayish brown (2.5Y 5/2) silt loam; weak medium and coarse prismatic structure parting to moderate medium subangular blocky; firm; common distinct dark grayish brown (2.5Y 4/2) clay films on faces of peds; common fine prominent yellowish brown (10YR 5/8) and brownish yellow (10YR 6/8) masses of iron; many prominent black (10YR 2/1) concretions of iron and manganese throughout; neutral; abrupt smooth boundary.

2Bt—38 to 40 inches; mottled yellowish brown (10YR 5/6), brown (7.5YR 5/4), and strong brown (7.5YR 5/6) clay loam; weak coarse angular blocky structure; firm; few distinct dark grayish brown (2.5YR 4/2) clay films on faces of peds; few prominent black (10YR 2/1) stains and concretions of iron and manganese throughout; neutral; abrupt smooth boundary.

3BCg—40 to 45 inches; greenish gray (5GY 6/1) clay; weak medium prismatic structure; extremely firm; strongly effervescent; slightly alkaline; gradual smooth boundary.

3Cr—45 to 60 inches; greenish gray (5GY 6/1) clayey shale; spots and streaks of yellow (10YR 7/8 and 8/6); massive; extremely firm; strongly effervescent; slightly alkaline.

Range in Characteristics

Thickness of the loess: 30 to 50 inches
Thickness of the mollic epipedon: 10 to 17 inches
Depth to paralithic contact: 40 to 60 inches
Thickness of the solum: 40 to 55 inches

Ap horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2

Bt horizon:
Hue—10YR or 2.5Y
Value—3 to 5
Chroma—2 or 3
Texture—silty clay loam or silt loam (lower part)

2Bt horizon (where present):
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—4 to 6
Texture—clay loam, loam, or silt loam

3BCg or 3Bg horizon:
Hue—2.5Y, 5Y, 5GY, or 5G
Value—5 or 6
Chroma—1 to 4
Texture—silty clay or clay

3Cr horizon:
Hue—2.5Y, 5Y, 5GY, or 5G
Value—5 or 6
Chroma—1 to 4

572C2—Loran silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Shoulders

Map Unit Composition

Loran and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less clay in the subsoil
- Soils that have a seasonal high water table within a depth of 1 foot
- Soils that have a lighter colored surface layer
- Soils that have more clay in the surface layer

Properties and Qualities of the Loran Soil

Parent material: Loess over till over residuum weathered from clayey shale
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Slow
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Available water capacity: About 9.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 4.0 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest perched seasonal high water table: 1.0 foot, February through April
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High

Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Medary Series

Taxonomic classification: Fine, mixed, superactive, mesic Oxyaquic Hapludalfs

Typical Pedon

Medary silty clay loam, 15 to 45 percent slopes, eroded; 1,220 feet north and 700 feet east of the southwest corner of sec. 22, T. 26 N., R. 2 E.; Jo Daviess County, Illinois; USGS Green Island topographic quadrangle; lat. 42 degrees 13 minutes 41 seconds N. and long. 90 degrees 16 minutes 20 seconds W., NAD 27:

A—0 to 5 inches; very dark grayish brown (10YR 3/2) silty clay loam, brown (10YR 5/2) dry; moderate fine subangular blocky structure parting to moderate medium granular; friable; slightly acid; abrupt smooth boundary.
2Bt1—5 to 11 inches; reddish brown (5YR 5/4) clay; moderate fine subangular blocky structure; firm; few distinct brown (7.5YR 4/2) organic coatings on faces of peds; common distinct reddish brown (5YR 5/3) clay films on faces of peds; moderately acid; clear smooth boundary.
2Bt2—11 to 20 inches; brown (7.5YR 5/4) silty clay; moderate fine angular blocky structure; firm; few distinct reddish brown (5YR 4/3) clay films on faces of peds; few fine distinct brown (7.5YR 5/2) and few medium distinct reddish brown (5YR 5/3) iron depletions; moderately acid; clear smooth boundary.
2Bt3—20 to 32 inches; reddish brown (5YR 5/4), light olive yellow (2.5Y 5/4, and grayish brown (2.5Y 5/2), stratified silty clay, silty clay loam, and silt loam; moderate medium subangular blocky structure; firm; common distinct reddish brown (5YR 5/3) and brown (10YR 4/3) clay films on faces of peds; moderately acid; clear smooth boundary.
2Bt4—32 to 40 inches; reddish brown (5YR 5/4), light brownish gray (2.5Y 6/2), and brown (7.5YR 5/4), stratified silt loam and silty clay; moderate fine prismatic structure parting to moderate medium subangular blocky; firm; common distinct reddish brown (5YR 5/3) clay films on faces of peds; common fine distinct strong brown (7.5YR 5/6) iron masses in the matrix; neutral; gradual smooth boundary.
2BC—40 to 46 inches; light brownish gray (2.5Y 6/2), reddish brown (5YR 4/3), and strong brown (7.5YR 5/6), stratified silt loam with silty clay along ped faces; moderate medium and coarse subangular blocky structure; friable; few distinct dark reddish brown (5YR 3/2) and reddish brown (5YR 4/3) clay films on faces of peds; neutral; clear smooth boundary.
2C—46 to 60 inches; strong brown (7.5YR 5/6), light brownish gray (2.5Y 6/2), reddish brown (5YR 4/3), and dark reddish gray (5YR 4/2), stratified silt loam and silty clay; massive; friable; few lime concretions; slightly effervescent; moderately alkaline.

Range in Characteristics

Thickness of the solum: 36 to 60 inches

Ap or A horizon:
Hue—10YR
Value—3 or 4
Chroma—2 or 3
Texture—silt loam or silty clay loam

2Bt horizon:
Hue—5YR or 7.5YR
Value—4 or 5
Chroma—4 to 6
Texture—silty clay loam, silty clay, or clay; thin strata of silt loam in some pedons

2C horizon:
Hue—5YR or 7.5YR
Value—4 or 5
Chroma—4 to 6
Texture—silty clay loam, silty clay, or clay; thin strata of silt loam in some pedons

569F2—Medary silty clay loam, 15 to 45 percent slopes, eroded

Setting

Landform: Stream terraces
Position on the landform: Backslopes

Map Unit Composition

Medary and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have more clay in the surface layer

Dissimilar soils:
- The somewhat poorly drained Wakeland soils on flood plains and in drainageways
- The well drained Seaton and Lamont soils in landform positions similar to those of the Medary soil

Properties and Qualities of the Medary Soil

Parent material: Silty alluvium and/or loess over clayey glaciolacustrine deposits
Drainage class: Moderately well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Depth and months of the highest apparent seasonal high water table: 2.0 feet, February through April
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.

Potential for frost action: Moderate
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Very high
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 7e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Millington Series

Taxonomic classification: Fine-loamy, mixed, superactive, calcareous, mesic Cumulic Endoaquolls

Typical Pedon

Millington silt loam, undrained, 0 to 2 percent slopes, frequently flooded; 700 feet south and 940 feet west of the northeast corner of sec. 25, T. 20 N., R. 4 E.; Whiteside County, Illinois; USGS Prophetstown topographic quadrangle; lat. 41 degrees 41 minutes 50 seconds N. and long. 89 degrees 58 minutes 54 seconds W., NAD 27:

A—0 to 19 inches; black (10YR 2/1) silt loam, very dark gray (10YR 3/1) dry; moderate fine subangular blocky structure; friable; few snail-shell fragments; slightly effervescent; slightly alkaline; clear smooth boundary.
Bg—19 to 35 inches; black (10YR 2/1) loam, very dark gray (10YR 3/1) dry; weak medium subangular blocky structure; friable; few snail-shell fragments; strongly effervescent; slightly alkaline; clear smooth boundary.
Cg—35 to 60 inches; olive gray (5Y 5/2) loam that has few thin strata of sandy loam; massive; friable; common medium prominent strong brown (7.5YR 5/8) iron masses and common medium faint dark gray (5Y 4/1) iron depletions in the matrix; few snail-shell fragments; strongly effervescent; slightly alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 24 to 40 inches
Thickness of the solum: 24 to 48 inches

Ap or A horizon:
Hue—10YR or N
Value—2 or 3
Chroma—0 to 2
Texture—loam, silt loam, silty clay loam, or clay loam

Bg horizon:
Hue—10YR, 2.5Y, 5Y, or N
Value—2 to 5
Chroma—0 to 2
Texture—loam, silt loam, silty clay loam, or clay loam; strata of sandy loam and/or gravel in some pedons

Cg horizon:
Chroma—0 to 2
Texture—stratified, calcareous sandy loam to silty clay loam

1082A—Millington silt loam, undrained, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Millington and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less sand in the surface layer and subsoil
- Soils that have sandy strata in the subsoil and substratum
- Soils that are not subject to ponding

Properties and Qualities of the Millington Soil

Parent material: Calcareous alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 4.0 to 6.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, November through June
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 5w
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

3082A—Millington silt loam, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Millington and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have less sand in the surface layer and subsoil

- Soils that have sandy strata in the subsoil and substratum
- Soils that are not subject to ponding

Properties and Qualities of the Millington Soil

Parent material: Calcareous alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 4.0 to 6.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3w
Prime farmland category: Prime farmland where drained and either protected from flooding or not frequently flooded during the growing season
Hydric soil status: Hydric

7082A—Millington clay loam, 0 to 2 percent slopes, rarely flooded

Setting

Landform: Flood plains

Map Unit Composition

Millington and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that do not have a seasonal high water table within a depth of 1 foot

Dissimilar soils:
- Soils that are not calcareous

Properties and Qualities of the Millington Soil

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 4.0 to 6.0 percent
Shrink-swell potential: Moderate

Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Frequency and most likely period of flooding: Rare, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

Mt. Carroll Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Mollic Hapludalfs

Typical Pedon

Mt. Carroll silt loam, 2 to 5 percent slopes; 2,250 feet south and 720 feet east of the northwest corner of sec. 32, T. 22 N., R. 5 E.; Whiteside County, Illinois; USGS Morrison topographic quadrangle; lat. 41 degrees 51 minutes 09 seconds N. and long. 89 degrees 57 minutes 22 seconds W., NAD 27:

Ap—0 to 7 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; moderate fine and medium granular structure; friable; common very fine and fine roots throughout; slightly acid; clear smooth boundary.
E—7 to 10 inches; dark grayish brown (10YR 4/2) silt loam; moderate medium platy structure; friable; few fine roots throughout; many faint very dark grayish brown (10YR 3/2) organic coatings on faces of peds; few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; slightly acid; clear smooth boundary.
BE—10 to 17 inches; brown (10YR 4/3) silt loam; moderate fine subangular blocky structure; friable; few fine roots between peds; many faint dark brown (10YR 3/3) organic coatings on faces of peds; few faint very dark grayish brown (10YR 3/2) organic coatings in root channels; moderately acid; clear smooth boundary.
Bt1—17 to 25 inches; dark yellowish brown (10YR 4/4) silt loam; moderate fine and medium subangular blocky structure; friable; few fine roots between peds; few distinct very dark grayish brown (10YR 3/2) organic coatings in root channels; many faint brown (10YR 4/3) clay films on faces of peds; moderately acid; clear smooth boundary.
Bt2—25 to 39 inches; yellowish brown (10YR 5/4) silt loam; moderate fine and medium subangular blocky structure; friable; few fine roots between peds; common faint brown (10YR 4/3) clay films on faces of peds; common prominent very dark grayish brown (10YR 3/2) wormcasts; few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; moderately acid; gradual smooth boundary.
Bt3—39 to 55 inches; yellowish brown (10YR 5/4) silt loam; weak medium and coarse subangular blocky structure; friable; common faint brown (10YR 4/3) clay films on faces of peds; few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; moderately acid; gradual smooth boundary.
BC—55 to 62 inches; yellowish brown (10YR 5/4) silt loam; weak medium prismatic structure; friable; few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; few fine dark reddish brown (5YR 2.5/2) soft masses of iron-manganese in the matrix; moderately acid; gradual smooth boundary.

C—62 to 80 inches; mixed yellowish brown (10YR 5/4) and pale brown (10YR 6/3) silt loam; massive; friable; common fine and medium black (5YR 2.5/1) soft masses of iron-manganese; few fine distinct light brownish gray (10YR 6/2) iron depletions and few fine faint yellowish brown (10YR 5/6 and 5/8) iron masses in the matrix; slightly acid.

Range in Characteristics

Thickness of the dark surface layer: 6 to 9 inches
Thickness of the solum: 36 to 60 inches

Ap or A horizon:
Hue—10YR
Value—3
Chroma—1 to 3
Texture—silt loam

Bt horizon:
Hue—10YR
Value—4 or 5
Chroma—3 to 5
Texture—silt loam

C horizon:
Hue—10YR or 7.5YR
Value—4 or 5
Chroma—3 to 6
Texture—silt loam

268B—Mt. Carroll silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Backslopes and summits

Map Unit Composition

Mt. Carroll and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a dark surface soil more than 10 inches or less than 6 inches thick
- Soils that have a seasonal high water table 4 to 6 feet below the surface
- Soils that contain more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Joy soils on footslopes

Properties and Qualities of the Mt. Carroll Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent

Shrink-swell potential: Low
Flooding: None
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

268C2—Mt. Carroll silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Summits and backslopes

Map Unit Composition

Mt. Carroll and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a dark surface soil more than 10 inches or less than 6 inches thick
- Soils that have a seasonal high water table at a depth of 4 to 6 feet
- Soils that contain more clay in the subsoil
- Soils that have more sand and coarse silt in the substratum

Properties and Qualities of the Mt. Carroll Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

M-W—Miscellaneous water

- This map unit consists of water bodies that are not available for recreational or wildlife uses. They are mainly associated with water supply systems or waste disposal systems.

Muscatune Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Aquic Argiudolls

Typical Pedon

Muscatune silt loam (fig. 5), 0 to 2 percent slopes; 2,500 feet west and 2,240 feet north of the southeast corner of sec. 29, T. 9 N., R. 1 W.; Warren County, Illinois; USGS Greenbush topographic quadrangle; lat. 40 degrees 44 minutes 11 seconds N. and long. 90 degrees 31 minutes 46 seconds W., NAD 27:

Ap—0 to 7 inches; black (10YR 2/1) silt loam, dark grayish brown (10YR 4/2) dry; moderate fine granular structure; very friable; common very fine and fine roots throughout; neutral; abrupt smooth boundary.

A—7 to 13 inches; very dark gray (10YR 3/1) silt loam, dark grayish brown (10YR 4/2) dry; moderate fine granular structure; very friable; common very fine and fine roots throughout; neutral; clear smooth boundary.

AB—13 to 20 inches; mixed very dark grayish brown (10YR 3/2) and brown (10YR 4/3) silt loam, dark grayish brown (10YR 4/2) dry; moderate fine subangular blocky structure parting to weak fine granular; friable; common very fine roots throughout; few faint very dark gray (10YR 3/1) organic coatings on faces of peds; few faint dark grayish brown (10YR 4/2) clay films on faces of peds; neutral; clear smooth boundary.

Bt1—20 to 28 inches; brown (10YR 4/3) silty clay loam; moderate medium subangular blocky structure; friable; common few fine roots between peds; few faint dark grayish brown (10YR 4/2) clay films on faces of peds; common faint very dark grayish brown (10YR 3/2) organic coatings on faces of peds; common dark brown (7.5YR 3/2) manganese stains in the matrix; neutral; clear smooth boundary.

Bt2—28 to 38 inches; brown (10YR 5/3) silty clay loam; moderate medium subangular blocky structure; friable; few fine roots between peds; common distinct dark grayish brown (2.5Y 4/2) clay films on faces of peds; few fine distinct yellowish brown (10YR 5/6) and faint pale brown (10YR 6/3) iron masses in the matrix; common dark brown (7.5YR 3/2) manganese stains in the matrix; neutral; clear smooth boundary.

Btg—38 to 50 inches; light brownish gray (2.5Y 6/2) silty clay loam; moderate medium subangular blocky structure; friable; few very fine roots between peds; common prominent grayish brown (10YR 5/2) clay films on faces of peds; common fine prominent yellowish brown (10YR 5/6) and dark yellowish brown (10YR 4/6) iron masses in the matrix; common dark brown (7.5YR 3/2) manganese stains in the matrix; slightly acid; clear smooth boundary.

BCg—50 to 60 inches; light brownish gray (2.5Y 6/2) silt loam; weak medium subangular blocky structure; friable; common medium prominent yellowish brown (10YR 5/6) and dark yellowish brown (10YR 4/6) iron masses in the matrix; common dark brown (7.5YR 3/2) manganese stains in the matrix; slightly acid; clear smooth boundary.

Cg—60 to 80 inches; light brownish gray (2.5Y 6/2) silt loam; massive; friable; many medium prominent yellowish brown (10YR 5/6) and dark yellowish brown (10YR 4/6) iron masses in the matrix; few fine round very dark brown (10YR 2/2) soft masses of iron-manganese oxides in the matrix; neutral.



Figure 5.—A profile of a Muscatune soil.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches
Thickness of the loess: More than 60 inches
Depth to free carbonates: More than 40 inches
Thickness of the solum: 40 to 64 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—silt loam or silty clay loam

Bt horizon:
Hue—10YR or 2.5Y
Value—4 to 6
Chroma—2 to 4
Texture—silty clay loam

C horizon:
Hue—10YR or 2.5Y
Value—5 or 6

Chroma—2 to 4
Texture—silt loam or silty clay loam

51A—Muscatune silt loam, 0 to 2 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits

Map Unit Composition

Muscatune and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have more sand in the lower part of the subsoil
- Soils that have a seasonal high water table at a depth of 4 to 6 feet
- Soils that have less clay in the subsoil
- Soils that have slopes of more than 2 percent

Dissimilar soils:
- The poorly drained Sable soils on summits and toeslopes
- The well drained Osco soils on shoulders

Properties and Qualities of the Muscatune Soil

Parent material: Loess
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.5 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

51B—Muscatune silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits and shoulders

Map Unit Composition

Muscatune and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have more sand in the lower part of the subsoil
- Soils that have a seasonal high water table at a depth of 4 to 6 feet
- Soils that have less clay in the subsoil
- Soils that have slopes of less than 2 percent

Dissimilar soils:
- The well drained Osco soils on shoulders
- The poorly drained Sable soils on summits and toeslopes

Properties and Qualities of the Muscatune Soil

Parent material: Loess
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Myrtle Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Mollic Hapludalfs

Typical Pedon

Myrtle silt loam, 2 to 5 percent slopes; 490 feet west and 165 feet north of the southeast corner of sec. 19, T. 29 N., R. 9 E.; Stephenson County, Illinois; USGS Davis quadrangle; lat. 42 degrees 29 minutes 27 seconds N. and long. 89 degrees 29 minutes 58 seconds W., NAD 83:

Ap—0 to 8 inches; very dark gray (10YR 3/1) silt loam, gray (10YR 5/1) dry; moderate fine granular structure; friable; neutral; abrupt smooth boundary.
E—8 to 14 inches; dark grayish brown (10YR 4/2) silt loam; weak fine and medium crumb structure; friable; slightly acid; clear smooth boundary.
Bt1—14 to 19 inches; brown (10YR 4/3) silty clay loam; moderate very fine subangular blocky structure; friable; few faint very dark grayish brown (10YR 3/2) organo-clay

films on horizontal faces of peds; common distinct light gray (10YR 7/1) (dry) silt coatings on faces of peds; moderately acid; clear smooth boundary.

Bt2—19 to 27 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate fine subangular blocky structure; firm; common distinct dark brown (10YR 3/3) clay films on faces of peds; light gray (10YR 7/1) (dry) silt coatings on faces of peds; moderately acid; clear smooth boundary.

Bt3—27 to 37 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate medium subangular blocky structure; firm; common distinct dark brown (10YR 3/3) and very dark grayish brown (10YR 3/2) clay films and light gray (10YR 7/1) (dry) silt coatings on faces of peds; moderately acid; gradual smooth boundary.

Bt4—37 to 42 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate medium subangular blocky structure; firm; common distinct dark brown (7.5YR 3/3) clay films on faces of peds; few distinct light gray (10YR 7/1) (dry) silt coatings on faces of a few peds; about 12 percent (by volume) sand; moderately acid; clear smooth boundary.

2Bt5—42 to 80 inches; brown (7.5YR 4/4) clay loam; moderate medium and coarse subangular blocky structure; firm; common distinct reddish brown (5YR 4/4) and dark reddish brown (5YR 3/3) clay films on faces of peds; few fine prominent black (N 2.5/) iron-manganese stains in the matrix; moderately acid.

Range in Characteristics

Thickness of the loess: 30 to 50 inches
Thickness of the solum: More than 60 inches

Ap or A horizon:
- Hue—10YR
- Value—2 or 3
- Chroma—1 or 2
- Texture—silt loam

E horizon:
- Hue—10YR
- Value—4 or 5
- Chroma—2 or 3
- Texture—silt loam

Bt horizon:
- Hue—10YR or 7.5YR
- Value—4 or 5
- Chroma—3 to 5
- Texture—silty clay loam or silt loam

2Bt horizon:
- Hue—7.5YR, 5YR, or 2.5YR
- Value—4 to 6
- Chroma—4 to 6
- Texture—clay loam, silty clay loam, or sandy clay loam

2C horizon:
- Hue—10YR or 7.5YR
- Value—4 to 6
- Chroma—4 to 6
- Texture—loam, clay loam, or sandy loam

414B—Myrtle silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits and shoulders

Map Unit Composition

Myrtle and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface horizon
- Soils that have less than 30 inches or more than 50 inches of loess over the till

Properties and Qualities of the Myrtle Soil

Parent material: Loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 10.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

414C2—Myrtle silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Myrtle and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface horizon
- Soils that have less than 30 inches or more than 50 inches of loess over the till

Properties and Qualities of the Myrtle Soil

Parent material: Loess over a paleosol that formed in till
Drainage class: Well drained

Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

NewGlarus Series

Taxonomic classification: Fine-silty over clayey, mixed, superactive, mesic Typic Hapludalfs
Taxadjunct feature: The NewGlarus soils in this survey area are thinner over limestone bedrock than is defined as the range for the series.

Typical Pedon

NewGlarus silt loam, in an area of NewGlarus-Lamoille silt loams, 18 to 35 percent slopes (fig. 6); 980 feet south and 2,490 feet west of the northeast corner of sec. 17, T. 26 N., R. 5 E.; Jo Daviess County, Illinois; USGS Kent quadrangle; lat. 42 degrees 15 minutes 07 seconds N. and long. 89 degrees 56 minutes 57 seconds W., NAD 83:

A—0 to 5 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; moderate fine granular structure; friable; common fine roots; common distinct very dark gray (10YR 3/1) organic coatings on faces of peds; about 2 percent chert fragments of gravel size; neutral; abrupt smooth boundary.
BE—5 to 14 inches; dark yellowish brown (10YR 4/4) silt loam; moderate medium platy structure parting to moderate medium and fine subangular blocky; friable; few fine roots; many distinct dark brown (10YR 3/3) organic coatings on faces of peds; few distinct very dark grayish brown (10YR 3/2) organic coatings along root channels; about 10 percent chert fragments of gravel size; neutral; clear smooth boundary.
Bt1—14 to 22 inches; yellowish brown (10YR 5/4) silty clay loam; strong medium and fine angular blocky structure; firm; few fine and medium roots; many distinct dark yellowish brown (10YR 4/4) clay films on faces of peds; about 10 percent chert fragments of gravel size; moderately acid; abrupt smooth boundary.
2Bt2—22 to 34 inches; strong brown (7.5YR 5/6) gravelly silty clay; strong medium and fine angular blocky structure; firm; few medium roots; many prominent dark reddish brown (5YR 3/2) clay films on faces of peds; about 20 percent chert fragments of gravel size with dolomite fragments of cobble and stone size in the lower part; neutral; clear wavy boundary.



Figure 6.—Vertical limestone outcrops are common in areas of NewGlarus-Lamoille silt loams, 18 to 35 percent slopes.

2R—34 inches; level bedded dolomite with 6 inches of yellow (10YR 7/6) fragmented dolomite in the upper part and strong brown (7.5YR 5/6) silty clay residuum in fissures.

Range in Characteristics

Thickness of the loess: 12 to 35 inches
Thickness of the residuum: 6 to 20 inches
Thickness of the solum: 20 to 40 inches

Ap or A horizon:
Hue—10YR
Value—3 or 4
Chroma—2 or 3
Texture—silt loam or silty clay loam

BE horizon:
Hue—10YR
Value—3 to 5
Chroma—3 or 4
Texture—silt loam or silty clay loam

Bt horizon:
Hue—7.5YR or 10YR
Value—4 or 5

Chroma—3 to 6
Texture—silt loam or silty clay loam

2Bt horizon:
Hue—2.5YR, 5YR, or 7.5YR
Value—3 to 5
Chroma—3 to 6
Texture—silty clay, clay, clay loam, or silty clay loam or the channery or flaggy analogs of these textures

3Bt horizon:
Hue—7.5YR or 10YR
Value—3 or 4
Chroma—2 to 4
Texture—loam or sandy loam or the very channery, very flaggy, extremely channery, or extremely flaggy analogs of these textures

905F—NewGlarus-Lamoille silt loams, 18 to 35 percent slopes

Setting

Landform: Hillslopes
Position on the landform: NewGlarus—middle and lower backslopes; Lamoille—upper backslopes

Map Unit Composition

NewGlarus and similar soils: 55 percent
Lamoille and similar soils: 45 percent

Minor Components

Similar soils:
- Soils that have bedrock within a depth of 60 inches

Properties and Qualities of the NewGlarus Soil

Parent material: Loess over clayey pedisediment over loamy residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Available water capacity: About 5.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamoille Soil

Parent material: Thin mantle of loess over clayey residuum over loamy-skeletal colluvium
Drainage class: Well drained

Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Moderately slow
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: NewGlarus—6e; Lamoille—6e
Prime farmland category: Not prime farmland
Hydric soil status: NewGlarus—not hydric; Lamoille—not hydric

905G—NewGlarus-Lamoille silt loams, 35 to 60 percent slopes

Setting

Landform: Hillslopes
Position on the landform: Backslopes

Map Unit Composition

NewGlarus and similar soils: 55 percent
Lamoille and similar soils: 45 percent

Minor Components

Similar soils:
- Soils that do not have bedrock within a depth of 40 inches

Properties and Qualities of the NewGlarus Soil

Parent material: Loess over clayey pedisediment over loamy residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Available water capacity: About 5.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamoille Soil

Parent material: Thin mantle of loess over clayey residuum over loamy-skeletal colluvium

Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Moderately slow
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: NewGlarus—6e; Lamoille—6e
Prime farmland category: Not prime farmland
Hydric soil status: NewGlarus—not hydric; Lamoille—not hydric

928C2—NewGlarus-Palsgrove silt loams, 5 to 10 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: NewGlarus—middle and lower backslopes; Palsgrove—shoulders and upper backslopes

Map Unit Composition

NewGlarus and similar soils: 50 percent
Palsgrove and similar soils: 50 percent

Minor Components

Similar soils:
- Soils that do not have bedrock within a depth of 60 inches
- Soils that have clayey till over the bedrock

Properties and Qualities of the NewGlarus Soil

Parent material: Loess over clayey pedisediment over loamy residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Available water capacity: About 6.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium

Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Properties and Qualities of the Palsgrove Soil

Parent material: Loess over residuum weathered from limestone and dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Slow or moderately slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 9.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: NewGlarus—3e; Palsgrove—3e
Prime farmland category: Not prime farmland
Hydric soil status: NewGlarus—not hydric; Palsgrove—not hydric

928D2—NewGlarus-Palsgrove silt loams, 10 to 18 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: NewGlarus—middle and lower backslopes; Palsgrove—upper backslopes

Map Unit Composition

NewGlarus and similar soils: 50 percent
Palsgrove and similar soils: 50 percent

Minor Components

Similar soils:
- Soils that do not have bedrock within a depth of 60 inches
- Soils that have clayey till over the bedrock

Properties and Qualities of the NewGlarus Soil

Parent material: Loess over clayey pedisediment over loamy residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Available water capacity: About 6.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High

Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Palsgrove Soil

Parent material: Loess over residuum weathered from limestone and dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Slow or moderately slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 9.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: NewGlarus—3e; Palsgrove—3e
Prime farmland category: Not prime farmland
Hydric soil status: NewGlarus—not hydric; Palsgrove—not hydric

Niota Series

Taxonomic classification: Fine, mixed, superactive, mesic Vertic Albaqualfs

Typical Pedon

Niota silt loam, 0 to 2 percent slopes; 600 feet north and 1,320 feet east of the southwest corner of sec. 30, T. 19 N., R. 3 E.; Rock Island County, Illinois; USGS Hillsdale topographic quadrangle; lat. 41 degrees 36 minutes 01 second N. and long. 90 degrees 12 minutes 17 seconds W., NAD 27:

A—0 to 7 inches; black (10YR 2/1) silt loam, gray (10YR 5/1) dry; moderate very fine and fine granular structure; friable; many fine roots throughout; neutral; clear smooth boundary.
E—7 to 14 inches; mixed grayish brown (10YR 5/2) and dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; moderate thin platy structure parting to moderate fine granular; friable; common fine roots throughout; common distinct light gray (10YR 7/1) (dry) silt coatings on faces of peds; few fine dark concretions of iron and manganese in the matrix; strongly acid; abrupt smooth boundary.
2Bt—14 to 24 inches; reddish brown (5YR 4/4) silty clay; moderate medium prismatic structure parting to moderate medium subangular blocky; very firm; few fine roots

between peds; many distinct grayish brown (2.5Y 5/2) clay films on faces of peds; very strongly acid; clear smooth boundary.

2Btg1—24 to 37 inches; mixed gray (5Y 5/1) and light gray (5Y 6/1) silty clay loam; moderate medium prismatic structure parting to moderate medium subangular blocky; firm; few fine roots between peds; common distinct dark gray (5Y 4/1) clay films on faces of peds; few fine dark concretions of iron and manganese in the matrix; few fine and medium prominent yellowish red (5YR 4/6) masses of iron in the matrix; very strongly acid; gradual smooth boundary.

3Btg2—37 to 53 inches; gray (5Y 6/1) silt loam; weak coarse prismatic structure parting to weak medium subangular blocky; friable; common distinct reddish gray (5YR 5/2) clay films on faces of peds; many prominent black (7.5YR 2.5/1) iron and manganese stains on faces of peds; many fine dark concretions of iron and manganese in the matrix; few fine and medium prominent yellowish red (5YR 4/6) masses of iron in the matrix; very strongly acid; clear smooth boundary.

3Cg—53 to 60 inches; gray (5Y 6/1) silt loam; massive; friable; many fine dark concretions of iron and manganese in the matrix; many fine and medium prominent yellowish red (5YR 4/6) masses of iron in the matrix; slightly acid.

Range in Characteristics

Thickness of the solum: 40 to 60 inches
Thickness of the loess: Less than 20 inches
Depth to lacustrine sediments: 10 to 20 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2

Eg horizon:
Hue—10YR or 2.5Y
Value—4 to 6
Chroma—1 to 3

2Bt or 2Btg horizon:
Hue—2.5YR to 5Y or N
Value—4 to 6
Chroma—0 to 4
Texture—silty clay, clay, or silty clay loam

3Btg or 3BCg horizon (where present):
Hue—7.5YR to 5Y or N
Value—4 to 6
Chroma—0 to 2
Texture—silt loam, silty clay loam, or loam

3Cg horizon:
Texture—silt loam; strata of loam, clay loam, sandy loam, silty clay loam, or loamy fine sand in some pedons

261A—Niota silt loam, 0 to 2 percent slopes

Setting

Landform: Lacustrine plains
Position on the landform: Toeslopes

Map Unit Composition

Niota and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay in the surface layer
- Soils that have a gray subsoil

Properties and Qualities of the Niota Soil

Parent material: Glaciolacustrine deposits
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Very slow
Permeability below a depth of 60 inches: Moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 10.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and high for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

Ogle Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Argiudolls
Taxadjunct features: The Ogle soils in map units 412C2 and 412C3 have a thinner dark surface layer than is defined as the range for the series. The Ogle soil in map unit 412C2 is classified as a fine-silty, mixed, superactive, mesic Mollic Hapludalf. The Ogle soil in map unit 412C3 is classified as a fine-silty, mixed, superactive, mesic Typic Hapludalf.

Typical Pedon

Ogle silt loam; 75 feet north and 495 feet east of the southwest corner of SE$^{1}/_{4}$ sec. 30, T. 24 N., R. 7 E.; Carroll County, Illinois; USGS Brookville quadrangle; lat. 42 degrees 02 minutes 21 seconds N. and long. 89 degrees 43 minutes 57 seconds W., NAD 83:

A—0 to 11 inches; very dark brown (10YR 2/2) silt loam; moderate fine granular structure; friable; slightly acid; gradual smooth boundary.
AB—11 to 15 inches; dark brown (10YR 3/3) silt loam; moderate very fine subangular blocky structure; friable; many very dark brown (10YR 2/2) wormcasts; moderately acid; gradual smooth boundary.
Bt1—15 to 22 inches; brown (10YR 4/3) silty clay loam; moderate fine subangular blocky structure; firm; common distinct dark brown (10YR 3/3 organo-clay films on

faces of peds; few very dark grayish brown (10YR 3/2) wormcasts; few fine gray (10YR 5/1) (dry) specks on faces of peds; strongly acid; gradual smooth boundary.

Bt2—22 to 33 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate fine and medium subangular blocky structure; firm; common distinct dark brown (7.5YR 3/4) clay films on faces of peds; moderately acid; gradual smooth boundary.

Bt3—33 to 40 inches; yellowish brown (10YR 5/4) silty clay loam; moderate medium subangular blocky structure; firm; common distinct dark brown (7.5YR 3/4) clay films on faces of peds; few sand grains and angular pebbles in the lower part; moderately acid; clear smooth to wavy boundary.

2Bt4—40 to 60 inches; reddish brown (5YR 4/4) clay loam; strong medium and coarse subangular blocky structure; firm; common distinct dark reddish brown (5YR 3/4) clay films on faces of peds; moderately acid.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 18 inches
Thickness of the loess: 30 to 50 inches
Thickness of the solum: More than 5 feet

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—silt loam or silty clay loam

Bt horizon:
Hue—10YR or 7.5YR
Value—4 or 5
Chroma—3 to 5
Texture—silty clay loam or silt loam

2Bt horizon:
Hue—2.5YR, 5YR, or 7.5YR
Value—4 to 6
Chroma—4 to 6
Texture—clay loam, sandy clay loam, or silty clay loam

2C horizon:
Texture—loam, clay loam, or sandy loam

412B—Ogle silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Ogle and similar soils: 85 percent
Dissimilar soils: 15 percent

Minor Components

Similar soils:
- Soils that have a thinner dark surface horizon
- Soils that contain sandy subhorizons in the subsoil
- Soils that have loamy textures within a depth of 30 inches

Dissimilar soils:
- The well drained Ashdale soils in landform positions similar to those of the Ogle soil

Properties and Qualities of the Ogle Soil

Parent material: Loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 10.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 5.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

412C2—Ogle silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Ogle and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface horizon
- Soils that contain sandy subhorizons in the subsoil
- Soils that have loamy textures within a depth of 30 inches

Dissimilar soils:
- The well drained Ashdale soils in landform positions similar to those of the Ogle soil

Properties and Qualities of the Ogle Soil

Parent material: Loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 5.0 percent
Shrink-swell potential: Moderate
Flooding: None

Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

412C3—Ogle silty clay loam, 5 to 10 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Ogle and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface horizon
- Soils that contain sandy subhorizons in the subsoil
- Soils that have loamy textures within a depth of 30 inches

Dissimilar soils:
- The well drained Ashdale soils in landform positions similar to those of the Ogle soil

Properties and Qualities of the Ogle Soil

Parent material: Loess over a paleosol that formed in till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.2 to 1.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e

Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Orion Series

Taxonomic classification: Coarse-silty, mixed, superactive, nonacid, mesic Aquic Udifluvents

Typical Pedon

Orion silt loam, 0 to 2 percent slopes, frequently flooded; 270 feet south and 1,000 feet east of the northwest corner of sec. 17, T. 22 N., R. 6 E.; Whiteside County, Illinois; USGS Milledgeville topographic quadrangle; lat. 41 degrees 54 minutes 06 seconds N. and long. 89 degrees 50 minutes 13 seconds W., NAD 27:

A—0 to 5 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; massive; friable; many thin strata of brown (10YR 4/3) and very dark gray (10YR 3/1) silt loam; neutral; abrupt smooth boundary.
C1—5 to 15 inches; dark grayish brown (10YR 4/2) silt loam; massive; friable; many thin strata of pale brown (10YR 6/3) and yellowish brown (10YR 5/4) silt loam; few fine prominent brown (7.5YR 4/4) masses of iron in the matrix; neutral; clear wavy boundary.
C2—15 to 29 inches; dark grayish brown (10YR 4/2) silt loam; massive; friable; many thin strata of dark yellowish brown (10YR 4/4), yellowish brown (10YR 5/6), and pale brown (10YR 6/3) silt loam; few very dark gray (10YR 3/1) wormcasts; few fine prominent brown (7.5YR 4/4) masses of iron in the matrix; neutral; abrupt wavy boundary.
Ab1—29 to 39 inches; black (2.5Y 2.5/1) silt loam; weak thick platy structure parting to weak medium and fine subangular blocky; friable; neutral; clear smooth boundary.
Ab2—39 to 51 inches; black (2.5Y 2.5/1) silty clay loam; strong medium and fine angular blocky structure; friable; neutral; clear smooth boundary.
Ab3—51 to 60 inches; very dark gray (10YR 3/1) silty clay loam; moderate medium and fine subangular blocky structure; friable; neutral.

Range in Characteristics

Depth to dark buried soil: 20 to 40 inches
Thickness of the surface layer: 5 to 10 inches

Ap or A horizon:
Hue—10YR
Value—3 to 6
Chroma—2 or 3
Texture—silt loam; stratified in some pedons

C horizon:
Hue—10YR
Value—3 to 5
Chroma—2 or 3
Texture—silt loam; stratified in some pedons

Ab horizon:
Hue—10YR or 2.5Y
Value—2 or 3
Chroma—1 or 2
Texture—silty clay loam or silt loam; stratified in some pedons

3415A—Orion silt loam, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Orion and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more sand in the upper part
- Soils that do not have a buried soil within a depth of 40 inches
- Soils that have a seasonal high water table within a depth of 1 foot
- Soils that do not have a seasonal high water table within a depth of 3 feet

Properties and Qualities of the Orion Soil

Parent material: Alluvium
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3w
Prime farmland category: Prime farmland where protected from flooding or not frequently flooded during the growing season
Hydric soil status: Not hydric

7415A—Orion silt loam, 0 to 2 percent slopes, rarely flooded

Setting

Landform: Flood plains

Map Unit Composition

Orion and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more sand in the upper part

- Soils that do not have a buried soil within a depth of 40 inches
- Soils that do not have a seasonal high water table within a depth of 3 feet

Properties and Qualities of the Orion Soil

Parent material: Alluvium
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Frequency and most likely period of flooding: Rare, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

802B—Orthents, loamy, undulating

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Orthents and similar soils: 85 percent
Dissimilar soils: 15 percent

Minor Components

Similar soils:
- Soils that are mostly silt loam or silty clay loam
- Soils that have a seasonal high water table within a depth of 60 inches

Dissimilar soils:
- Well drained till soils on backslopes
- The well drained Pecatonica soils on backslopes
- The somewhat poorly drained Orion soils on flood plains

Properties and Qualities of the Orthents

Parent material: Mine spoil or earthy fill
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately slow
Permeability below a depth of 60 inches: Moderately slow
Depth to restrictive feature: More than 80 inches
Available water capacity: About 10.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent

Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Osco Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Argiudolls
Taxadjunct features: The Osco soils in map units 86C2 and 86C3 have a thinner dark surface layer than is defined as the range for the series. These soils are classified as fine-silty, mixed, superactive, mesic Mollic Hapludalfs.

Typical Pedon

Osco silt loam (fig. 7), 2 to 5 percent slopes; at an elevation of 858 feet; 316 feet north and 88 feet west of the southeast corner of sec. 23, T. 24 N., R. 6 E.; Carroll County, Illinois; USGS Lanark topographic quadrangle; lat. 42 degrees 03 minutes 15 seconds N. and long. 89 degrees 45 minutes 52 seconds W., NAD 27:

Ap—0 to 10 inches; very dark brown (10YR 2/2) silt loam, very dark grayish brown (10YR 3/2) dry; moderate fine granular structure; friable; common fine roots; slightly acid; abrupt smooth boundary.
A—10 to 14 inches; very dark grayish brown (10YR 3/2) silt loam, dark grayish brown (10YR 4/2) dry; moderate medium and coarse granular structure; friable; common fine roots; strongly acid; clear smooth boundary.
BA—14 to 20 inches; dark yellowish brown (10YR 3/4) and dark brown (10YR 3/3) silt loam, brown (10YR 5/3) dry; weak fine subangular blocky structure; friable; common fine roots; few distinct light brownish gray (10YR 6/2) (dry) silt coatings on faces of peds; strongly acid; clear smooth boundary.
Bt1—20 to 26 inches; brown (10YR 4/3) silty clay loam; moderate fine subangular blocky structure; friable; few fine roots; few distinct gray (10YR 6/1) (dry) silt coatings and common faint dark brown (10YR 3/3) clay films on faces of peds; strongly acid; clear smooth boundary.
Bt2—26 to 37 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate medium subangular blocky structure; firm; few fine roots; common distinct light brownish gray (10YR 6/2) (dry) silt coatings and many faint dark yellowish brown (10YR 4/4) clay films on faces of peds; common fine faint brown (10YR 5/3) and common medium prominent strong brown (7.5YR 5/8) masses of iron in the matrix; many prominent very dark gray (N 3/) and dark brown (7.5YR 3/2) iron-manganese concretions in the matrix; strongly acid; clear smooth boundary.
Bt3—37 to 45 inches; light yellowish brown (10YR 6/4) silty clay loam; moderate coarse subangular blocky structure; friable; few fine roots; many faint dark yellowish brown (10YR 4/4) clay films on faces of peds; common fine distinct light brownish gray (10YR 6/2) iron depletions and few medium prominent strong brown (7.5YR 5/8) masses of iron in the matrix; strongly acid; gradual smooth boundary.
BC—45 to 55 inches; yellowish brown (10YR 5/4) and brown (10YR 4/3) silty clay loam; weak coarse angular blocky structure; friable; few fine distinct light brownish



Figure 7.—A profile of an Osco soil.

gray (10YR 6/2) iron depletions in the matrix; strongly acid; gradual smooth boundary.

C—55 to 60 inches; yellowish brown (10YR 5/4) and brown (10YR 4/3) silt loam; massive; friable; many fine distinct yellowish brown (10YR 5/6) masses of iron and common medium distinct grayish brown (10YR 5/2) iron depletions in the matrix; moderately acid.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 18 inches
Thickness of the solum: 40 to more than 60 inches
Depth to free carbonates: More than 48 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—silt loam

Bt horizon:
Hue—10YR
Value—4 to 6
Chroma—3 or 4
Texture—silty clay loam or silt loam

C or Cg horizon:
Hue—10YR or 2.5Y
Value—4 or 5
Chroma—3 to 6
Texture—silt loam

86A—Osco silt loam, 0 to 2 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits

Map Unit Composition

Osco and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a seasonal high water table within a depth of 4 feet
- Soils that have a thinner dark surface layer

Dissimilar soils:
- The poorly drained Sable soils in the lower areas that are subject to ponding

Properties and Qualities of the Osco Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 4.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

86B—Osco silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders and summits

Map Unit Composition

Osco and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have more sand in the lower part of the profile
- Soils that have a seasonal high water table within a depth of 4 feet
- Soils that have less clay in the subsoil
- Soils that have slopes of less than 2 percent

Dissimilar soils:
- The poorly drained Sable soils in depressions and drainageways
- The somewhat poorly drained Ipava soils on summits
- The poorly drained Sable and Virden soils on summits and toeslopes
- The poorly drained Denny soils in depressions

Properties and Qualities of the Osco Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 4.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

86C—Osco silt loam, 5 to 10 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Backslopes and shoulders

Map Unit Composition

Osco and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have more sand in the lower part
- Soils that have a seasonal high water table within a depth of 4 feet
- Soils that have less clay in the subsoil
- Soils that have slopes of 2 to 5 percent
- Soils that have a dark surface horizon less than 10 inches thick

Dissimilar soils:
- The poorly drained Sable soils in depressions and drainageways

Properties and Qualities of the Osco Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate (fig. 8)
Susceptibility to wind erosion: Low



Figure 8.—Terraces help to control erosion in this area of Osco silt loam, 5 to 10 percent slopes.

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

86C2—Osco silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Shoulders and backslopes

Map Unit Composition

Osco and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have more sand in the lower part
- Soils that have a seasonal high water table within a depth of 4 feet
- Soils that have less clay in the subsoil

Dissimilar soils:
- The poorly drained Sable soils in depressions and drainageways

Properties and Qualities of the Osco Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

86C3—Osco silty clay loam, 5 to 10 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Shoulders and backslopes

Map Unit Composition

Osco and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have more sand in the lower part
- Soils that have a seasonal high water table within a depth of 4 feet
- Soils that have less clay in the subsoil

Dissimilar soils:
- The poorly drained Sable soils in depressions and drainageways

Properties and Qualities of the Osco Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Otter Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Cumulic Endoaquolls

Typical Pedon

Otter silt loam, 0 to 2 percent slopes; 1,960 feet west and 2,540 feet south of the northeast corner of sec. 35, T. 22 N., R. 5 E.; Whiteside County, Illinois; USGS

Morrison topographic quadrangle; lat. 41 degrees 51 minutes 06 seconds N. and long. 89 degrees 53 minutes 18 seconds W., NAD 27:

Ap—0 to 10 inches; black (10YR 2/1) silt loam, dark gray (10YR 4/1) dry; moderate medium granular structure; friable; slightly acid; abrupt smooth boundary.

A1—10 to 16 inches; black (10YR 2/1) silt loam, dark gray (10YR 4/1) dry; weak fine subangular blocky structure parting to moderate medium granular; friable; slightly acid; clear smooth boundary.

A2—16 to 21 inches; black (2.5Y 2.5/1) silt loam, very dark gray (10YR 3/1) dry; weak fine subangular blocky structure parting to moderate medium granular; friable; few fine distinct grayish brown (2.5Y 5/2) iron depletions and few fine prominent yellowish brown (10YR 5/8) iron masses in the matrix; few fine prominent dark reddish brown (5YR 2.5/2) coatings of iron on faces of peds; slightly acid; clear smooth boundary.

A3—21 to 35 inches; black (2.5Y 2.5/1) mucky silt loam, black (2.5Y 2.5/1) dry; weak medium subangular blocky structure; friable; few fine prominent strong brown (7.5YR 4/6) iron masses in the matrix; few fine prominent dark reddish brown (5YR 2.5/2) coatings of iron on faces of peds; slightly acid; clear smooth boundary.

AB—35 to 43 inches; very dark gray (10YR 3/1) silt loam, gray (10YR 5/1) dry; weak coarse subangular blocky structure; friable; few fine prominent dark reddish brown (5YR 2.5/2) coatings of iron on faces of peds; common medium faint dark gray (10YR 4/1) iron depletions and few fine prominent brown (7.5YR 4/4) iron masses in the matrix; neutral; clear smooth boundary.

Bg—43 to 50 inches; grayish brown (2.5Y 5/2) silt loam; weak coarse subangular blocky structure; friable; few distinct very dark grayish brown (10YR 3/2) organic coatings in root channels; common medium prominent yellowish brown (10YR 5/6) and few medium prominent brown (7.5YR 4/4) iron masses in the matrix; neutral; clear smooth boundary.

Cg—50 to 60 inches; light brownish gray (2.5Y 6/2) silt loam; massive; friable; common fine prominent yellowish brown (10YR 5/6) iron masses in the matrix; neutral.

Range in Characteristics

Thickness of the mollic epipedon: 24 to 50 inches
Thickness of the solum: 24 to 50 inches

Ap, A, or AB horizon:
Hue—7.5YR, 10YR, 2.5Y, or N
Value—2 or 3
Chroma—0 to 2
Texture—silt loam

Bg horizon:
Hue—7.5YR, 10YR, 2.5Y, or N
Value—2 to 6
Chroma—0 to 4
Texture—silt loam, loam, sandy loam, or silty clay loam

Cg horizon:
Hue—10YR, 2.5Y, 5Y, or N
Value—2 to 6
Chroma—0 to 4
Texture—silt loam or loam; strata of silty clay loam or sandy loam in some pedons

1076A—Otter silt loam, undrained, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Otter and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay in the surface layer and subsoil
- Soils that have sandy strata in the substratum
- Soils that have a dark surface soil less than 24 inches thick
- Soils that do not have a seasonal high water table within a depth of 2 feet

Properties and Qualities of the Otter Soil

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, November through June
Deepest ponding: 0.2 foot, January to June
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 5w
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

3076A—Otter silt loam, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Otter and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have more clay in the surface layer and subsoil
- Soils that have sandy strata in the substratum
- Soils that have a dark surface soil less than 24 inches thick
- Soils that do not have a seasonal high water table within a depth of 2 feet

Dissimilar soils:
- The well drained Huntsville soils in the slightly higher positions on flood plains

Properties and Qualities of the Otter Soil

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained and either protected from flooding or not frequently flooded during the growing season
Hydric soil status: Hydric

7076A—Otter silt loam, 0 to 2 percent slopes, rarely flooded

Setting

Landform: Flood plains

Map Unit Composition

Otter and similar soils: 97 percent
Dissimilar soils: 3 percent

Minor Components

Similar soils:
- Soils that have more clay in the solum

Dissimilar soils:
- The well drained Huntsville soils in the slightly higher positions on flood plains
- The poorly drained Millington soils in landform positions similar to those of the Otter soil

Properties and Qualities of the Otter Soil

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 10.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Frequency and most likely period of flooding: Rare, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

Palms Series

Taxonomic classification: Loamy, mixed, euic, mesic Terric Haplosaprists

Typical Pedon

Palms muck, 0 to 2 percent slopes, rarely flooded; 2,040 feet east and 140 feet south of the northwest corner of sec. 6, T. 21 N., R. 4 E.; Whiteside County, Illinois; USGS Union Grove topographic quadrangle; lat. 41 degrees 50 minutes 37 seconds N. and long. 90 degrees 05 minutes 06 seconds W., NAD 27:

Oap—0 to 10 inches; sapric material, black (N 2.5/) broken face and rubbed; about 10 percent fiber, 5 percent rubbed; weak fine granular structure; friable; slightly acid; abrupt smooth boundary.

Oa—10 to 28 inches; sapric material, black (5YR 2.5/1) broken face, black (10YR 2/1) rubbed; about 10 percent fiber, 5 percent rubbed; weak medium platy structure; friable; few thin strata of very dark gray (10YR 3/1) silt loam that has few fine distinct dark yellowish brown (10YR 4/4) iron masses in the matrix; few fine faint dark reddish brown (5YR 2.5/2) coatings of iron on faces of peds; neutral; clear smooth boundary.

Cg1—28 to 36 inches; very dark gray (10YR 3/1) mucky silt loam; massive; friable; few fine prominent reddish brown (2.5YR 4/4) iron masses in the matrix; neutral; clear smooth boundary.

Cg2—36 to 41 inches; gray (5Y 5/1) silt loam; massive; friable; few very dark gray (10YR 3/1) krotovinas; common fine prominent light olive brown (2.5Y 5/4), brown (7.5YR 5/4), and reddish brown (5YR 5/3) iron masses in the matrix; neutral; clear smooth boundary.

Cg3—41 to 60 inches; gray (5Y 5/1) silt loam; massive; friable; few fine prominent yellowish brown (10YR 5/6) iron masses in the matrix; slightly effervescent; slightly alkaline.

Range in Characteristics

Thickness of the organic material: 16 to 50 inches

Oap or Oa horizon:
Hue—10YR to 5YR or N
Value—2 or 3
Chroma—0 to 2

Cg horizon:
Hue—10YR, 2.5Y, 5Y, or N
Value—3 to 6
Chroma—0 to 2

7100A—Palms muck, 0 to 2 percent slopes, rarely flooded

Setting

Landform: Backswamps

Map Unit Composition

Palms and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 16 inches or more than 50 inches of organic material over mineral soil

Dissimilar soils:
- Soils that contain more sand in the solum
- Soils that are calcareous

Properties and Qualities of the Palms Soil

Parent material: Herbaceous organic material over loamy alluvium
Drainage class: Very poorly drained
Slowest permeability within a depth of 40 inches: Moderately slow
Permeability below a depth of 60 inches: Moderately slow or moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 16.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 75.0 to 99.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: At the surface, November through June
Deepest ponding: 0.5 foot, November through June
Frequency and most likely period of flooding: Rare, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: High

Interpretive Groups

Land capability classification: 3w
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

Palsgrove Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Palsgrove silt loam, 2 to 5 percent slopes; 2,355 feet south and 275 feet east of the center of sec. 24, T. 23 N., R. 9 E.; Ogle County, Illinois; USGS Grand Detour quadrangle; lat. 41 degrees 57 minutes 38 seconds N. and long. 89 degrees 24 minutes 15 seconds W., NAD 27:

Ap—0 to 28 cm (0 to 11 inches); dark grayish brown (10YR 4/2) silt loam, pale brown (10YR 6/2) dry; moderate fine and medium granular structure; friable; common roots; slightly acid; abrupt smooth boundary.

Bt1—28 to 43 cm (11 to 17 inches); dark yellowish brown (10YR 4/4) silty clay loam; weak fine prismatic structure parting to moderate fine and medium subangular blocky; friable; few roots; common distinct brown (10YR 4/3) clay films and few prominent light gray (10YR 7/1) (dry) silt coatings on faces of peds; moderately acid; clear smooth boundary.

Bt2—43 to 71 cm (17 to 28 inches); mixed yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) silty clay loam; weak medium prismatic structure parting to moderate fine and medium subangular blocky; friable; few roots; common distinct brown (10YR 4/3) clay films and few prominent light gray (10YR 7/1) (dry) silt coatings on faces of peds; strongly acid; clear smooth boundary.

Bt3—71 to 89 cm (28 to 35 inches); mixed yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) silty clay loam; moderate coarse prismatic structure parting to moderate medium and coarse subangular blocky; friable; few roots; common distinct brown (10YR 4/3) clay films and few prominent light gray (10YR 7/1) (dry) silt coatings on faces of peds; moderately acid; clear smooth boundary.

Bt4—89 to 122 cm (35 to 48 inches); mixed yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) silty clay loam; moderate coarse prismatic structure; friable; few roots; common distinct brown (10YR 4/3) clay films on faces of peds; few fine black (7.5YR 2.5/1) iron and manganese oxides in the matrix; moderately acid; clear smooth boundary.

2Bt5—122 to 140 cm (48 to 55 inches); mixed reddish brown (5YR 4/4) and dark reddish brown (5YR 3/3) clay; moderate coarse prismatic structure; very firm; few fine and very fine roots; 2 percent cherty gravel; common distinct dark brown (7.5YR 4/4) clay films on faces of peds; neutral; clear smooth boundary.

2R—140 cm (55 inches); level bedded dolomitic limestone; partly disintegrated in the upper 3 to 5 inches.

Range in Characteristics

Thickness of the loess: 36 to 50 inches
Thickness of the residuum: 2 to 20 inches
Thickness of the solum: 40 to 60 inches

Ap or A horizon:
Hue—10YR
Value—2 to 4
Chroma—2 or 3
Texture—silt loam or silty clay loam

E or BE horizon:
Value—4 or 5

Chroma—2 or 3
Texture—silt loam

Bt horizon:
Hue—10YR
Value—4 or 5
Chroma—3 or 4
Texture—silty clay loam or silt loam

2Bt or 2BC horizon:
Hue—2.5YR, 5YR, 7.5YR, or 10YR
Value—3 to 5
Chroma—3 to 8
Texture—clay

429C2—Palsgrove silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: Backslopes and shoulders

Map Unit Composition

Palsgrove and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay or less silt in the upper part
- Soils that have bedrock within a depth of 40 inches

Properties and Qualities of the Palsgrove Soil

Parent material: Loess over residuum weathered from limestone and dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Slow or moderately slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 9.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

928C2—NewGlarus-Palsgrove silt loams, 5 to 10 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: NewGlarus—middle and lower backslopes; Palsgrove—shoulders and upper backslopes

Map Unit Composition

NewGlarus and similar soils: 50 percent
Palsgrove and similar soils: 50 percent

Minor Components

Similar soils:
- Soils that do not have bedrock within a depth of 60 inches
- Soils that have clayey till over the bedrock

Properties and Qualities of the NewGlarus Soil

Parent material: Loess over clayey pedisediment over loamy residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Available water capacity: About 6.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Properties and Qualities of the Palsgrove Soil

Parent material: Loess over residuum weathered from limestone and dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Slow or moderately slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 9.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium

Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: NewGlarus—3e; Palsgrove—3e
Prime farmland category: Not prime farmland
Hydric soil status: NewGlarus—not hydric; Palsgrove—not hydric

928D2—NewGlarus-Palsgrove silt loams, 10 to 18 percent slopes, eroded

Setting

Landform: Hillslopes
Position on the landform: NewGlarus—middle and lower backslopes; Palsgrove—upper backslopes

Map Unit Composition

NewGlarus and similar soils: 50 percent
Palsgrove and similar soils: 50 percent

Minor Components

Similar soils:
- Soils that do not have bedrock within a depth of 60 inches
- Soils that have clayey till over the bedrock

Properties and Qualities of the NewGlarus Soil

Parent material: Loess over clayey pedisediment over loamy residuum weathered from dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Slow to moderate
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Available water capacity: About 6.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Palsgrove Soil

Parent material: Loess over residuum weathered from limestone and dolomite
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Slow or moderately slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 9.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent

Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: NewGlarus—3e; Palsgrove—3e
Prime farmland category: Not prime farmland
Hydric soil status: NewGlarus—not hydric; Palsgrove—not hydric

Pecatonica Series

Taxonomic classification: Fine-loamy, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Pecatonica silt loam, 5 to 10 percent slopes, eroded; 2,140 feet east and 1,760 feet north of the southwest corner of sec. 1, T. 22 N., R. 4 E.; Whiteside County, Illinois; USGS Fair Haven topographic quadrangle; lat. 41 degrees 55 minutes 17 seconds N. and long. 89 degrees 59 minutes 24 seconds W., NAD 27:

Ap—0 to 7 inches; brown (10YR 4/3) silt loam, pale brown (10YR 6/3) dry; weak medium subangular blocky structure parting to weak medium granular; friable; few yellowish brown (10YR 5/4) fragments of subsoil material; common faint dark brown (10YR 3/3) organic coatings on faces of peds; neutral; abrupt smooth boundary.

Bt1—7 to 13 inches; yellowish brown (10YR 5/4) silt loam; moderate medium and fine subangular blocky structure; friable; few faint brown (10YR 4/3) clay films on faces of peds and few distinct dark brown (10YR 3/3) organic coatings in root channels; moderately acid; clear smooth boundary.

Bt2—13 to 19 inches; yellowish brown (10YR 5/6) silt loam; moderate fine subangular blocky structure; friable; common distinct brown (10YR 4/3) clay films on faces of peds; few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; strongly acid; clear smooth boundary.

2Bt3—19 to 23 inches; strong brown (7.5YR 5/6) loam; moderate medium and fine subangular blocky structure; friable; common distinct brown (7.5YR 4/4) clay films on faces of peds; strongly acid; clear smooth boundary.

2Bt4—23 to 29 inches; strong brown (7.5YR 5/6) clay loam; moderate medium subangular blocky structure; firm; common prominent reddish brown (5YR 4/4) clay films on faces of peds; 2 percent chert and igneous pebbles; moderately acid; clear smooth boundary.

2Bt5—29 to 44 inches; yellowish red (5YR 4/6) clay loam; moderate coarse subangular blocky structure; firm; few distinct reddish brown (5YR 4/4) clay films on faces of peds; 2 percent chert and igneous pebbles; moderately acid; clear smooth boundary.

2Bt6—44 to 60 inches; yellowish red (5YR 4/6) clay loam; weak coarse subangular blocky structure; firm; few distinct reddish brown (5YR 4/4) clay films on faces of peds; 5 percent chert and igneous pebbles; strata of gravelly sandy loam at a depth of 56 inches; moderately acid.

Range in Characteristics

Thickness of the loess: 15 to 25 inches
Thickness of the solum: More than 60 inches

Ap or A horizon:
Hue—10YR
Value—4
Chroma—2 or 3
Texture—silt loam

Bt horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—4 to 6
Texture—silt loam

2Bt or 2BC horizon:
Hue—5YR or 7.5YR
Value—4 or 5
Chroma—4 to 6
Texture—clay loam, loam, or sandy clay loam

2C horizon:
Hue—5YR
Value—4 to 6
Chroma—4 to 6
Texture—loam, clay loam, or sandy clay loam or the gravelly analogs of these textures

21B—Pecatonica silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders and summits

Map Unit Composition

Pecatonica and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches or more than 30 inches of loess over the underlying till
- Soils that have thin sandy strata in the middle or lower part of the subsoil

Dissimilar soils:
- The well drained Woodbine soils on backslopes and footslopes

Properties and Qualities of the Pecatonica Soil

Parent material: Thin layer of loess over a paleosol that formed in loamy till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent

Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

21C2—Pecatonica silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Pecatonica and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches or more than 30 inches of loess over the underlying till
- Soils that have thin sandy strata in the middle or lower part of the subsoil

Dissimilar soils:
- The well drained Woodbine soils on backslopes and footslopes

Properties and Qualities of the Pecatonica Soil

Parent material: Thin layer of loess over a paleosol that formed in loamy till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e

Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

21C3—Pecatonica silty clay loam, 5 to 10 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Pecatonica and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches or more than 30 inches of loess over the underlying till
- Soils that have thin sandy strata in the middle or lower part of the subsoil

Dissimilar soils:
- The well drained Woodbine soils on backslopes and footslopes

Properties and Qualities of the Pecatonica Soil

Parent material: Thin layer of loess over a paleosol that formed in loamy till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 10.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.2 to 1.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

21D2—Pecatonica silt loam, 10 to 18 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Pecatonica and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches or more than 30 inches of loess over the underlying till
- Soils that have thin sandy strata in the middle or lower part of the subsoil

Dissimilar soils:
- The well drained Woodbine soils on backslopes and footslopes

Properties and Qualities of the Pecatonica Soil

Parent material: Thin layer of loess over a paleosol that formed in loamy till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

21D3—Pecatonica silty clay loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Pecatonica and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches or more than 30 inches of loess over the underlying till
- Soils that have thin sandy strata in the middle or lower part of the subsoil

Dissimilar soils:
- The well drained Woodbine soils on backslopes and footslopes

Properties and Qualities of the Pecatonica Soil

Parent material: Thin layer of loess over a paleosol that formed in loamy till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 10.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.2 to 1.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

21F2—Pecatonica silt loam, 18 to 35 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Pecatonica and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 15 inches or more than 30 inches of loess over the underlying till
- Soils that have thin sandy strata in the middle or lower part of the subsoil

Dissimilar soils:
- The well drained Woodbine soils on backslopes and footslopes
- Soils that are calcareous; in landform positions similar to those of the Pecatonica soil

Properties and Qualities of the Pecatonica Soil

Parent material: Thin layer of loess over a paleosol that formed in loamy till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches

Available water capacity: About 10.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

862—Pits, sand

- This map unit consists of excavated areas from which sand and gravel have been removed. The remaining floors are nearly level, and sidewalls are very steep or nearly vertical. Areas of this map unit generally do not support vegetation.

864—Pits, quarries

- This map unit consists of excavated areas from which limestone bedrock has been removed. The remaining floors are nearly level, and sidewalls are very steep or nearly vertical. Areas of this map unit generally do not support vegetation.

865—Pits, gravel

- This map unit consists of excavated areas of gravelly outwash deposits from which gravelly and sandy material has been removed. The remaining floors are nearly level, and sidewalls are very steep or nearly vertical. Areas of this map unit generally do not support vegetation.

Port Byron Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Hapludolls
Taxadjunct features: The Port Byron soil in map unit 277C2 has a thinner dark surface layer than is defined as the range for the series. This soil is classified as a fine-silty, mixed, superactive, mesic Mollic Hapludalf.

Typical Pedon

Port Byron silt loam, 2 to 5 percent slopes; 2,620 feet south and 400 feet east of the northwest corner of sec. 9, T. 20 N., R. 3 E.; Whiteside County, Illinois; USGS Erie Northwest topographic quadrangle; lat. 41 degrees 44 minutes 13 seconds N. and long. 90 degrees 10 minutes 08 seconds W., NAD 27:

Ap—0 to 8 inches; very dark gray (10YR 3/1) silt loam, dark grayish brown (10YR 4/2) dry; weak medium granular structure; friable; many very fine and fine roots throughout; moderately acid; abrupt smooth boundary.

A—8 to 13 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; moderate medium and fine subangular blocky structure; friable; common very fine and fine roots throughout; many faint very dark gray (10YR 3/1) organic coatings on faces of peds; slightly acid; clear smooth boundary.

BA—13 to 20 inches; brown (10YR 4/3) silt loam; moderate medium and fine subangular blocky structure; friable; common fine roots between peds; many faint very dark grayish brown (10YR 3/2) organic coatings on faces of peds; few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; few faint very dark grayish brown (10YR 3/2) wormcasts; slightly acid; clear smooth boundary.

Bw1—20 to 31 inches; dark yellowish brown (10YR 4/4) silt loam; moderate medium and fine subangular blocky structure; friable; common fine and medium roots between peds; common faint brown (10YR 4/3) clay films on faces of peds; few faint dark brown (10YR 3/3) wormcasts; moderately acid; clear smooth boundary.

Bw2—31 to 40 inches; yellowish brown (10YR 5/4) silt loam; moderate coarse and medium subangular blocky structure; friable; few fine roots between peds; common faint brown (10YR 4/3) clay films on faces of peds; few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; moderately acid; clear smooth boundary.

Bw3—40 to 52 inches; yellowish brown (10YR 5/4) silt loam; weak coarse subangular blocky structure; friable; few fine roots between peds; few faint dark yellowish brown (10YR 4/4) clay films on faces of peds; few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; few fine faint pale brown (10YR 6/3) masses of iron in the matrix; slightly acid; clear smooth boundary.

BC—52 to 60 inches; yellowish brown (10YR 5/4) silt loam; weak medium and coarse prismatic structure; firm; few fine roots between peds; few distinct light gray (10YR 7/2) (dry) silt coatings on faces of peds; common fine faint yellowish brown (10YR 5/6) masses of iron in the matrix; few fine dark brown (7.5YR 3/2) coatings of iron-manganese oxides on faces of peds; slightly acid; clear smooth boundary.

C1—60 to 66 inches; yellowish brown (10YR 5/4) silt loam; massive; friable; common fine faint yellowish brown (10YR 5/6 and 5/8) masses of iron in the matrix; few fine and medium irregular brown (7.5YR 4/4) and few fine prominent rounded black (N 2.5/) concretions of iron-manganese oxides throughout the matrix; common medium prominent black (5Y 2.5/1) irregular masses of iron-manganese in root channels and pores in the lower 2 inches; neutral; gradual smooth boundary.

C2—66 to 77 inches; 50 percent yellowish brown (10YR 5/4) and 50 percent pale brown (10YR 6/3) silt loam; massive; friable; common fine and medium faint yellowish brown (10YR 5/6) and few medium distinct strong brown (7.5YR 5/6) masses of iron in the matrix; light brownish gray (10YR 6/2) iron depletions; few fine and medium prominent irregular black (N 2.5/) concretions of iron-manganese throughout the matrix; neutral; gradual smooth boundary.

C3—77 to 89 inches; 70 percent yellowish brown (10YR 5/4) and 30 percent pale brown (10YR 6/3) silt; massive; friable; common fine faint yellowish brown (10YR 5/6 and 5/8) masses of iron in the matrix; few fine faint light brownish gray (10YR 6/2) and gray (10YR 6/1) iron depletions; few fine prominent rounded black (N 2.5/) concretions of iron-manganese throughout the matrix; neutral.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 24 inches
Thickness of the solum: 42 to more than 60 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 to 3
Texture—silt loam

BA or Bw horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 or 4
Texture—silt loam

C horizon:
Hue—10YR or 2.5Y
Value—5 or 6
Chroma—2 to 4
Texture—silt loam

277B—Port Byron silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders

Map Unit Composition

Port Byron and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have a seasonal high water table within a depth of 60 inches
- Soils that have more sand in the lower part of the subsoil
- Soils that have a dark surface soil more than 24 inches thick
- Soils that have a dark surface soil less than 10 inches thick

Dissimilar soils:
- The somewhat poorly drained Joy soils on footslopes

Properties and Qualities of the Port Byron Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

277C—Port Byron silt loam, 5 to 10 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders

Map Unit Composition

Port Byron and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have a seasonal high water table within a depth of 60 inches
- Soils that have more sand in the lower part of the subsoil
- Soils that have a dark surface soil less than 10 inches thick

Dissimilar soils:
- The somewhat poorly drained Joy soils on footslopes

Properties and Qualities of the Port Byron Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

277C2—Port Byron silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Shoulders

Map Unit Composition

Port Byron and similar soils: 97 percent
Dissimilar soils: 3 percent

Minor Components

Similar soils:
- Soils that have a seasonal high water table within a depth of 60 inches
- Soils that have more sand in the lower part of the subsoil
- Soils that have a dark surface soil more than 10 inches thick

Dissimilar soils:
- The somewhat poorly drained Joy soils on footslopes

Properties and Qualities of the Port Byron Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Riley Series

Taxonomic classification: Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Fluvaquentic Hapludolls

Typical Pedon

Riley loam, 0 to 2 percent slopes, frequently flooded; 2,540 feet north and 120 feet east of the southwest corner of sec. 34, T. 20 N., R. 4 E.; Whiteside County, Illinois; USGS Erie topographic quadrangle; lat. 41 degrees 40 minutes 39 seconds N. and long. 90 degrees 02 minutes 07 seconds W., NAD 27:

Ap—0 to 8 inches; black (10YR 2/1) loam, dark gray (10YR 4/1) dry; weak medium subangular blocky structure parting to moderate fine granular; friable; common fine roots throughout; slightly acid; abrupt smooth boundary.

A—8 to 17 inches; very dark grayish brown (10YR 3/2) loam, dark grayish brown (10YR 4/2) dry; weak medium and fine subangular blocky structure parting to moderate fine granular; friable; few fine roots throughout; few fine rounded black (N 2.5/) soft masses of iron-manganese oxides throughout the matrix; slightly acid; clear smooth boundary.

Bw1—17 to 27 inches; brown (10YR 4/3) clay loam; moderate medium subangular blocky structure; friable; few fine roots between peds; few very dark grayish brown (10YR 3/2) organic coatings on faces of peds; few faint dark grayish brown (10YR 4/2) iron depletions in the matrix; few fine prominent black (N 2.5/) soft masses of iron-manganese oxides throughout the matrix; neutral; clear smooth boundary.
Bw2—27 to 34 inches; brown (10YR 4/3) sandy clay loam; moderate medium subangular blocky structure; friable; common fine faint dark grayish brown (10YR 4/2) iron depletions and common fine faint dark yellowish brown (10YR 4/4) masses of iron in the matrix; few fine prominent black (N 2.5/) soft masses of iron-manganese oxides throughout the matrix; neutral; abrupt smooth boundary.
2C1—34 to 39 inches; stratified dark grayish brown (10YR 4/2) and yellowish brown (10YR 5/4) loamy sand; massive; very friable; neutral; abrupt smooth boundary.
2C2—39 to 60 inches; yellowish brown (10YR 5/4) sand; single grain; loose; few fine and medium prominent strong brown (7.5YR 5/6 and 5/8) masses of iron in the matrix; neutral.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 18 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—loam, sandy clay loam, or clay loam

Bw horizon:
Hue—10YR
Value—4 to 6
Chroma—2 to 4
Texture—loam, sandy clay loam, or clay loam

2C horizon:
Hue—10YR
Value—4 to 6
Chroma—2 to 4
Texture—loamy fine sand, loamy sand, or sand

7452A—Riley loam, 0 to 2 percent slopes, rarely flooded

Setting

Landform: Flood plains

Map Unit Composition

Riley and similar soils: 85 percent
Dissimilar soils: 15 percent

Minor Components

Similar soils:
- Soils that have more clay and less sand in the solum
- Soils that have a seasonal high water table at a depth of less than 1.0 foot or more than 3.0 feet

Dissimilar soils:
- The well drained Dickinson and excessively drained Sparta soils in the higher positions

Properties and Qualities of the Riley Soil

Parent material: Alluvium over sandy sediments
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 4.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 1.0 foot, January through May
Frequency and most likely period of flooding: Rare, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Rodman Series

Taxonomic classification: Sandy-skeletal, mixed, mesic Typic Hapludolls

Typical Pedon

Rodman gravelly loam, 6 to 12 percent slopes, eroded; at an elevation of 530 feet; 2,120 feet south and 740 feet west of the northeast corner of sec. 9, T. 33 N., R. 9 E.; Will County, Illinois; USGS Wilmington topographic quadrangle; lat. 41 degrees 21 minutes 25 seconds N. and long. 88 degrees 11 minutes 43 seconds W., NAD 27:

A—0 to 8 inches; very dark grayish brown (10YR 3/2) gravelly loam, grayish brown (10YR 5/2) dry; weak fine granular structure; very friable; many very fine and common fine roots; 15 percent gravel; neutral; clear smooth boundary.
Bw—8 to 12 inches; dark brown (10YR 3/3) gravelly loam; weak fine subangular blocky structure parting to weak fine granular; very friable; common very fine roots; few faint very dark grayish brown (10YR 3/2) organic coatings on faces of peds; 15 percent gravel; slightly alkaline; abrupt smooth boundary.
C1—12 to 18 inches; brown (10YR 4/3) very gravelly loamy sand; massive; very friable; common very fine roots; few faint very dark grayish brown (10YR 3/2) organic coatings on sand and gravel; 40 percent gravel; slightly effervescent; slightly alkaline; clear wavy boundary.
C2—18 to 60 inches; dark yellowish brown (10YR 4/4) very gravelly sand; single grain; loose; few very fine roots; 45 percent gravel and 15 percent cobbles; slightly effervescent; slightly alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 6 to 15 inches
Depth to carbonates: 10 to 15 inches
Thickness of the solum: 10 to 15 inches

A or Ap horizon:
Hue—7.5YR or 10YR
Value—2 or 3
Chroma—1 or 2
Texture—loam, sandy loam, gravelly loam, or gravelly sandy loam
Content of gravel—10 to 25 percent

Bw horizon:
Hue—7.5YR or 10YR
Value—3 or 4
Chroma—2 or 3
Texture—loam, sandy loam, gravelly loam, or gravelly sandy loam
Content of gravel—10 to 35 percent

C horizon:
Hue—10YR
Value—3 to 5
Chroma—1 to 4
Texture—the very gravelly or extremely gravelly analogs of loamy sand, sand, loamy coarse sand, or coarse sand
Content of gravel—35 to 70 percent

735D2—Casco-Rodman-Fox complex, 6 to 12 percent slopes, eroded

Setting

Landform: Stream terraces
Position on the landform: Backslopes

Map Unit Composition

Casco and similar soils: 35 percent
Rodman and similar soils: 31 percent
Fox and similar soils: 29 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less gravel and more sand or silt in the lower layers

Dissimilar soils:
- Soils underlain by till or limestone bedrock

Properties and Qualities of the Casco Soil

Parent material: Loamy alluvium over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 3.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate

Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Rodman Soil

Parent material: Sandy and gravelly glaciofluvial deposits
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 2.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Ponding: None
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion:

Properties and Qualities of the Fox Soil

Parent material: Loamy alluvium and/or thin layer of loess over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Casco—4e; Rodman—4s; Fox—3e
Prime farmland category: Not prime farmland
Hydric soil status: Casco—not hydric; Rodman—not hydric; Fox—not hydric

735E2—Casco-Rodman-Fox complex, 12 to 20 percent slopes, eroded

Setting

Landform: Stream terraces
Position on the landform: Backslopes

Map Unit Composition

Casco and similar soils: 35 percent
Rodman and similar soils: 31 percent
Fox and similar soils: 29 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have less gravel and more sand or silt in the lower layers

Dissimilar soils:
- Soils underlain by till or limestone bedrock

Properties and Qualities of the Casco Soil

Parent material: Loamy alluvium over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 3.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Rodman Soil

Parent material: Sandy and gravelly glaciofluvial deposits
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 2.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Ponding: None
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low

Susceptibility to water erosion: Low
Susceptibility to wind erosion:

Properties and Qualities of the Fox Soil

Parent material: Loamy alluvium and/or thin layer of loess over calcareous, stratified sandy outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Casco—6e; Rodman—6s; Fox—4e
Prime farmland category: Not prime farmland
Hydric soil status: Casco—not hydric; Rodman—not hydric; Fox—not hydric

Rozetta Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Rozetta silt loam, 0 to 2 percent slopes; at an elevation of 890 feet; 150 feet south and 500 feet east of the center of sec. 18, T. 27 N., R. 6 E.; Stephenson County, Illinois; USGS Pearl City topographic quadrangle; lat. 42 degrees 20 minutes 00 seconds N. and long. 89 degrees 51 minutes 19 seconds W., NAD 27:

A—0 to 4 inches; very dark gray (10YR 3/1) silt loam, gray (10YR 6/1) dry; weak medium granular structure; friable; many fine roots throughout; moderately acid; clear wavy boundary.
E—4 to 11 inches; dark grayish brown (10YR 4/2) silt loam; weak medium platy structure; friable; many fine roots throughout; strongly acid; clear smooth boundary.
BE—11 to 14 inches; brown (10YR 4/3) silty clay loam; weak medium subangular blocky structure; firm; many fine roots between peds; few faint brown (10YR 5/3) (dry) silt coatings on faces of peds; strongly acid; clear smooth boundary.
Bt1—14 to 21 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate fine and medium subangular blocky structure; firm; many fine roots between peds; many faint brown (10YR 5/3) clay films on faces of peds; strongly acid; clear smooth boundary.
Bt2—21 to 39 inches; brown (10YR 5/3) silty clay loam; moderate medium and coarse subangular blocky structure; firm; common roots along faces of peds; many faint dark yellowish brown (10YR 4/4) clay films on faces of peds; common faint pale brown (10YR 6/3) (dry) silt coatings on faces of peds; few medium faint grayish

brown (10YR 5/2) iron depletions; common medium faint light yellowish brown (10YR 6/4) and brown (10YR 4/3) masses of iron in the matrix; strongly acid; clear smooth boundary.

Bt3—39 to 50 inches; yellowish brown (10YR 5/4) silty clay loam; weak coarse subangular blocky structure; firm; common roots along ped faces; few faint brown (10YR 4/3) clay films on faces of peds; common medium faint pale brown (10YR 6/3) and common medium distinct grayish brown (10YR 5/2) iron depletions in the matrix; moderately acid; clear smooth boundary.

C—50 to 60 inches; yellowish brown (10YR 5/4) silt loam; massive; friable; common medium distinct dark grayish brown (10YR 4/2) iron depletions in the matrix; slightly acid.

Range in Characteristics

Thickness of the solum: 42 to 72 inches

Ap or A horizon:
Hue—10YR
Value—3 to 5
Chroma—1 to 3
Texture—silt loam

E horizon:
Hue—10YR
Value—4 to 6
Chroma—2 or 3
Texture—silt loam

Bt horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—3 to 6
Texture—silty clay loam

C horizon:
Hue—10YR
Value—4 to 6
Chroma—2 to 6
Texture—silt loam or silty clay loam

279A—Rozetta silt loam, 0 to 2 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits

Map Unit Composition

Rozetta and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that do not have a seasonal high water table within a depth of 6 feet all year
- Soils that are silt loam throughout
- Soils that have a seasonal high water table at a depth of less than 4 feet

Properties and Qualities of the Rozetta Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April
Ponding: None
Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

279B—Rozetta silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders and summits

Map Unit Composition

Rozetta and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a darker surface layer
- Soils that do not have a seasonal high water table within a depth of 6 feet all year
- Soils that are silt loam throughout
- Soils that have a seasonal high water table at a depth of less than 4 feet

Properties and Qualities of the Rozetta Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: 4.0 feet, February through April

Flooding: None
Potential for frost action: High
Hazard of corrosion: Moderate for steel and high for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

Sable Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Endoaquolls

Typical Pedon

Sable silty clay loam, 0 to 2 percent slopes; 1,281 feet south and 97 feet west of the northeast corner of sec. 14, T. 9 N., R. 3 W.; Warren County, Illinois; USGS Kirkwood East topographic quadrangle; lat. 40 degrees 46 minutes 30 seconds N. and long. 90 degrees 41 minutes 32 seconds W., NAD 27:

Ap—0 to 8 inches; black (10YR 2/1) silty clay loam, dark gray (10YR 4/1) dry; moderate fine and medium granular structure; firm; moderately acid; abrupt smooth boundary.

A—8 to 19 inches; black (10YR 2/1) silty clay loam, dark gray (10YR 4/1) dry; moderate very fine angular blocky structure; firm; few fine rounded dark reddish brown (5YR 3/2) very weakly cemented iron and manganese oxides throughout; slightly acid; clear smooth boundary.

AB—19 to 23 inches; very dark gray (10YR 3/1) silty clay loam, grayish brown (10YR 5/2) dry; moderate fine angular blocky structure; firm; few faint very dark grayish brown (10YR 3/2) organic coatings on faces of peds; few fine rounded dark reddish brown (5YR 3/2) iron and manganese concretions throughout; slightly acid; clear smooth boundary.

Bg—23 to 29 inches; dark gray (10YR 4/1) silty clay loam; moderate fine and medium subangular blocky structure; firm; common faint very dark gray (10YR 3/1) organic coatings on faces of peds; common fine and medium rounded dark reddish brown (5YR 3/2) concretions of iron and manganese oxides throughout; common medium distinct brown (10YR 5/3) masses of iron in the matrix; few medium faint dark grayish brown (10YR 4/2) iron depletions; neutral; clear smooth boundary.

Btg1—29 to 38 inches; grayish brown (2.5Y 5/2) silty clay loam; moderate medium and coarse subangular blocky structure; firm; few distinct dark gray (10YR 4/1) clay films on faces of peds; many fine and medium rounded dark reddish brown (5YR 3/2) concretions of iron and manganese throughout; many medium prominent yellowish brown (10YR 5/6) masses of iron in the matrix; neutral; clear wavy boundary.

Btg2—38 to 47 inches; gray (N 5/) silt loam; weak medium prismatic structure parting to weak medium and coarse angular blocky; firm; few prominent grayish brown (10YR 5/2) clay films on faces of peds; common fine rounded dark reddish brown (5YR 3/2) concretions of iron and manganese; many medium prominent yellowish brown (10YR 5/6) masses of iron in the matrix; slightly alkaline; gradual smooth boundary.

Cg—47 to 60 inches; gray (N 5/) silt loam; massive; friable; many fine prominent yellowish brown (10YR 5/6) masses of iron in the matrix; slightly effervescent; slightly alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 12 to 24 inches
Thickness of the solum: 40 to 60 inches

Ap or A horizon:
Hue—10YR to 5Y or N
Value—2 or 3
Chroma—0 or 1
Texture—silty clay loam or silt loam

Bg or Btg horizon:
Hue—10YR to 5Y or N
Value—3 to 6
Chroma—0 to 2
Texture—silty clay loam or silt loam

Cg horizon:
Hue—10YR to 5Y or N
Value—4 to 6
Chroma—0 to 2
Texture—silt loam or silty clay loam

68A—Sable silty clay loam, 0 to 2 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Summits and toeslopes

Map Unit Composition

Sable and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a seasonal high water table at a depth of more than 1 foot
- Soils that are silt loam throughout
- Soils that have more sand in the lower part of the subsoil and in the substratum
- Soils that have a dark surface soil more than 24 inches thick

Dissimilar soils:
- Soils that have a seasonal high water table at a depth of 2.0 to 3.5 feet; on shoulder slopes
- The well drained Osco soils on summits

Properties and Qualities of the Sable Soil

Parent material: Loess
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.9 inches to a depth of 60 inches

Content of organic matter in the surface layer: 5.0 to 6.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

68A+—Sable silt loam, 0 to 2 percent slopes, overwash

Setting

Landform: Ground moraines
Position on the landform: Summits

Map Unit Composition

Sable and similar soils: 94 percent
Dissimilar soils: 6 percent

Minor Components

Similar soils:
- Soils that have a seasonal high water table at a depth of more than 1 foot
- Soils that are silt loam throughout
- Soils that have more sand in the lower part of the subsoil and in the substratum
- Soils that have a dark surface soil more than 24 inches thick

Dissimilar soils:
- The well drained Osco soils on summits

Properties and Qualities of the Sable Soil

Parent material: Loess
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible

Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

Sawmill Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Cumulic Endoaquolls

Typical Pedon

Sawmill silty clay loam, 0 to 2 percent slopes, occasionally flooded; 300 feet south and 750 feet east of the northwest corner of sec. 20, T. 15 N., R. 4 W.; Sangamon County, Illinois; USGS New City topographic quadrangle; lat. 39 degrees 44 minutes 34 seconds N. and long. 89 degrees 34 minutes 15 seconds W., NAD 27:

Ap—0 to 10 inches; very dark gray (10YR 3/1) and very dark grayish brown (10YR 3/2) silty clay loam, gray (10YR 5/1) dry; weak fine subangular blocky structure; firm; few fine roots throughout; few subrounded pebbles 1 to 3 mm in diameter; slightly acid; clear smooth boundary.

A1—10 to 17 inches; black (10YR 2/1) and very dark grayish brown (10YR 3/2) silty clay loam, dark gray (10YR 4/1) dry; moderate fine subangular blocky structure; firm; few fine roots between peds; few subrounded pebbles 1 to 3 mm in diameter; few fine prominent yellowish brown (10YR 5/6) masses of iron in the matrix; few fine concretions of manganese lining root channels and pores; neutral; clear smooth boundary.

A2—17 to 25 inches; black (10YR 2/1) silty clay loam, dark gray (10YR 4/1) dry; moderate fine and medium angular blocky structure; firm; few fine roots between peds; few fine concretions of manganese lining root channels and pores; few fine prominent yellowish brown (10YR 5/6) masses of iron in the matrix; neutral; clear smooth boundary.

AB—25 to 32 inches; very dark gray (10YR 3/1) silty clay loam, gray (10YR 5/1) dry; weak medium prismatic structure parting to moderate fine subangular blocky; firm; few fine roots between peds; few fine concretions of manganese lining root channels and pores; few fine prominent yellowish brown (10YR 5/6) masses of iron in the matrix; neutral; clear smooth boundary.

Bg—32 to 40 inches; dark gray (10YR 4/1) silty clay loam; weak medium prismatic structure parting to moderate fine and medium angular blocky; firm; few fine roots between peds; few faint very dark gray (10YR 3/1) organic coatings on faces of peds; few fine concretions of manganese lining root channels and pores; few fine prominent strong brown (7.5YR 5/6) masses of iron in the matrix; slightly alkaline; clear smooth boundary.

Btg1—40 to 49 inches; grayish brown (10YR 5/2) silty clay loam; moderate medium prismatic structure parting to weak medium angular blocky; firm; common distinct dark gray (10YR 4/1) clay films on faces of peds; few fine concretions of manganese lining root channels and pores; few fine prominent strong brown (7.5YR 5/6) and common fine distinct yellowish brown (10YR 5/4) masses of iron in the matrix; slightly alkaline; clear smooth boundary.

Btg2—49 to 58 inches; grayish brown (2.5Y 5/2) silty clay loam; moderate medium prismatic structure; firm; few distinct gray (10YR 5/1) clay films on faces of peds; few fine concretions of manganese lining pores; few fine prominent yellowish

brown (10YR 5/6) masses of iron in the matrix; slightly alkaline; gradual smooth boundary.
Cg—58 to 65 inches; grayish brown (2.5Y 5/2) silty clay loam; massive; firm; very dark gray (10YR 3/1) channel linings and fillings; many medium prominent yellowish brown (10YR 5/6) masses of iron in the matrix; slightly alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 24 to 36 inches
Thickness of the solum: 36 to 60 inches

Ap or A horizon:
Hue—10YR, 2.5Y, 5Y, or N
Value—2 or 3
Chroma—0 to 2
Texture—silty clay loam

Bg or Btg horizon:
Hue—10YR, 2.5Y, or 5Y
Value—3 to 6
Chroma—1 or 2
Texture—silty clay loam; strata in some pedons

Cg horizon:
Hue—10YR, 2.5Y, 5Y, or N
Value—4 to 6
Chroma—0 to 2
Texture—silty clay loam or clay loam; strata in some pedons

1107A—Sawmill silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Sawmill and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less clay in the control section
- Soils that have mucky or sandy textures in the subsoil
- Soils that have a surface soil less than 24 inches thick
- Soils that have more clay

Dissimilar soils:
- The well drained Huntsville soils in the slightly higher positions

Properties and Qualities of the Sawmill Soil

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.5 inches to a depth of 60 inches

Content of organic matter in the surface layer: 4.0 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, November through June
Deepest ponding: 0.2 foot, November through June
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 5w
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

3107+—Sawmill silt loam, 0 to 2 percent slopes, frequently flooded, overwash

Setting

Landform: Flood plains

Map Unit Composition

Sawmill and similar soils: 98 percent
Dissimilar soils: 2 percent

Minor Components

Similar soils:
- Soils that have less clay in the control section
- Soils that have mucky or sandy textures in the subsoil
- Soils that have a surface soil less than 24 inches thick
- Soils that have more clay

Dissimilar soils:
- The well drained Huntsville soils in the slightly higher positions

Properties and Qualities of the Sawmill Soil

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 4.0 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible

Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3w
Prime farmland category: Prime farmland where drained and either protected from flooding or not frequently flooded during the growing season
Hydric soil status: Hydric

3107A—Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Sawmill and similar soils: 99 percent
Dissimilar soils: 1 percent

Minor Components

Similar soils:
- Soils that have less clay in the control section
- Soils that have mucky or sandy textures in the subsoil
- Soils that have a surface soil less than 24 inches thick
- Soils that have more clay

Dissimilar soils:
- The well drained Huntsville soils in the slightly higher positions

Properties and Qualities of the Sawmill Soil

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 4.0 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot all year
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3w
Prime farmland category: Prime farmland where drained and either protected from flooding or not frequently flooded during the growing season
Hydric soil status: Hydric

7107+—Sawmill silt loam, 0 to 2 percent slopes, rarely flooded, overwash

Setting

Landform: Flood plains

Map Unit Composition

Sawmill and similar soils: 85 percent
Dissimilar soils: 15 percent

Minor Components

Similar soils:
- Soils that have less clay in the control section
- Soils that have mucky or sandy textures in the subsoil
- Soils that have a surface soil less than 24 inches thick
- Soils that contain more clay

Dissimilar soils:
- The well drained Huntsville soils in the slightly higher positions on flood plains

Properties and Qualities of the Sawmill Soil

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.8 inches to a depth of 60 inches
Content of organic matter in the surface layer: 4.0 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Ponding: None
Frequency and most likely period of flooding: Rare, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

7107A—Sawmill silty clay loam, 0 to 2 percent slopes, rarely flooded

Setting

Landform: Flood plains

Map Unit Composition

Sawmill and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less clay in the control section
- Soils that have mucky or sandy textures in the subsoil
- Soils that have a surface soil less than 24 inches thick
- Soils that contain more clay

Dissimilar soils:
- The well drained Huntsville soils in the slightly higher positions on flood plains

Properties and Qualities of the Sawmill Soil

Parent material: Alluvium
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 4.0 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Frequency and most likely period of flooding: Rare, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Very low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

Seaton Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Seaton silt loam, 2 to 5 percent slopes; 660 feet north and 30 feet east of the center of sec. 8, T. 11 N., R. 4 W.; Henderson County, Illinois; USGS Rozetta topographic quadrangle; lat. 40 degrees 57 minutes 44 seconds N. and long. 90 degrees 52 minutes 24 seconds W., NAD 27:

A—0 to 4 inches; dark brown (10YR 3/3) silt loam, brown (10YR 5/3) dry; weak fine granular structure; very friable; slightly acid; clear smooth boundary.
E—4 to 9 inches; brown (10YR 4/3) silt loam, pale brown (10YR 6/3) dry; weak thin platy structure; friable; slightly acid; clear smooth boundary.
BE—9 to 15 inches; yellowish brown (10YR 5/4) silt loam; weak fine and medium subangular blocky structure; friable; few faint dark brown (10YR 4/3) clay films and common faint light yellowish brown (10YR 6/4) silt coatings on faces of peds; moderately acid; clear smooth boundary.
Bt1—15 to 21 inches; yellowish brown (10YR 5/4) silt loam; moderate fine and medium subangular blocky structure; friable; few faint dark brown (10YR 4/3) clay films and

few faint light yellowish brown (10YR 6/4) silt coatings on faces of peds; moderately acid; clear smooth boundary.

Bt2—21 to 27 inches; brown (7.5YR 5/4) silt loam; moderate fine and medium subangular blocky structure; firm; few faint dark brown (10YR 4/3) clay films and few faint light yellowish brown (10YR 6/4) silt coatings on faces of peds; strongly acid; clear smooth boundary.

Bt3—27 to 34 inches; yellowish brown (10YR 5/4) silt loam; moderate medium angular blocky structure; firm; common faint dark brown (10YR 4/3) clay films on faces of peds; strongly acid; gradual smooth boundary.

Bt4—34 to 44 inches; brown (10YR 5/3) silt loam; weak medium and coarse prismatic structure; firm; few faint dark brown (10YR 4/3) clay films and few faint light yellowish brown (10YR 6/4) silt coatings on faces of peds; moderately acid; gradual smooth boundary.

BC—44 to 70 inches; brown (10YR 4/3) silt loam; weak very coarse prismatic structure; friable; few faint brown (7.5YR 4/2) clay films on vertical faces of peds; moderately acid; gradual smooth boundary.

C—70 to 95 inches; light brownish gray (10YR 6/2) and brown (10YR 5/3) silt loam; massive; friable; common fine faint dark yellowish brown (10YR 4/4) and yellowish brown (10YR 5/6) masses of iron; massive; friable; slightly acid.

Range in Characteristics

Thickness of the loess: More than 80 inches
Thickness of the solum: 42 to more than 60 inches

Ap or A horizon:
Hue—10YR
Value—2 to 4
Chroma—2 or 3
Texture—silt loam or silt
Reaction—moderately acid to neutral

E horizon (where present):
Hue—10YR
Value—4 to 6
Chroma—2 to 4
Texture—silt loam or silt
Reaction—moderately acid to neutral

Bt horizon:
Hue—7.5YR, 10YR, or 2.5Y
Value—4 or 5
Chroma—3 to 6
Texture—silt loam or silt
Reaction—very strongly acid to neutral

BC horizon (where present):
Hue—10YR or 2.5Y
Value—4 or 5
Chroma—3 or 4

C horizon:
Hue—10YR or 2.5Y
Value—4 to 6
Chroma—2 to 6
Texture—silt loam or silt
Reaction—moderately acid to moderately alkaline

274B—Seaton silt loam, 2 to 5 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders

Map Unit Composition

Seaton and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay in the subsoil
- Soils that have a dark surface horizon
- Soils that have more sand in the substratum
- Soils that have a seasonal high water table within a depth of 60 inches

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

274C—Seaton silt loam, 5 to 10 percent slopes

Setting

Landform: Ground moraines
Position on the landform: Shoulders

Map Unit Composition

Seaton and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay in the subsoil
- Soils that have a dark surface horizon
- Soils that have more sand in the substratum
- Soils that have a seasonal high water table within a depth of 60 inches

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

274C2—Seaton silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Shoulders

Map Unit Composition

Seaton and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay in the subsoil
- Soils that have a dark surface horizon
- Soils that have more sand in the substratum
- Soils that have a seasonal high water table within a depth of 60 inches

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Medium

Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

274D2—Seaton silt loam, 10 to 18 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Seaton and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more clay in the subsoil
- Soils that have a dark surface horizon
- Soils that have more sand in the substratum
- Soils that have a seasonal high water table within a depth of 60 inches

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

274D3—Seaton silt loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Seaton and similar soils: 98 percent
Dissimilar soils: 2 percent

Minor Components

Similar soils:
- Soils that have more clay in the subsoil
- Soils that have a dark surface horizon
- Soils that have more sand in the substratum
- Soils that have a seasonal high water table within a depth of 60 inches

Dissimilar soils:
- The somewhat poorly drained Orion and Wakeland soils in drainageways
- Soils that are calcareous

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.2 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

274E2—Seaton silt loam, 18 to 25 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Seaton and similar soils: 98 percent
Dissimilar soils: 2 percent

Minor Components

Similar soils:
- Soils that have more clay in the subsoil
- Soils that have a dark surface layer
- Soils that have more sand in the substratum
- Soils that have a seasonal high water table within a depth of 60 inches

Dissimilar soils:
- The somewhat poorly drained Orion and Wakeland soils in drainageways

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

274F—Seaton silt loam, 18 to 35 percent slopes

Setting

Landform: Till plains
Position on the landform: Backslopes

Map Unit Composition

Seaton and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have more clay in the subsoil
- Soils that have a dark surface layer
- Soils that have more sand in the substratum
- Soils that have a seasonal high water table within a depth of 60 inches

Dissimilar soils:
- The somewhat poorly drained Orion and Wakeland soils in drainageways

Properties and Qualities of the Seaton Soil

Parent material:
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches

Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 7e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

943F2—Seaton-Timula silt loams, 18 to 35 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Seaton and similar soils: 55 percent
Timula and similar soils: 45 percent

Minor Components

Similar soils:
- Soils that are calcareous within a depth of 20 inches
- Soils that are not calcareous within a depth of 40 inches
- Soils that contain more sand

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Timula Soil

Parent material: Loess
Drainage class: Well drained

Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Seaton—6e; Timula—6e
Prime farmland category: Not prime farmland
Hydric soil status: Seaton—not hydric; Timula—not hydric

943G2—Seaton-Timula silt loams, 35 to 60 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Seaton and similar soils: 55 percent
Timula and similar soils: 45 percent

Minor Components

Similar soils:
- Soils that contain more sand
- Soils that are calcareous within a depth of 20 inches
- Soils that are not calcareous within a depth of 40 inches

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High

Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Timula Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Seaton—7e; Timula—7e
Prime farmland category: Not prime farmland
Hydric soil status: Seaton—not hydric; Timula—not hydric

Selma Series

Taxonomic classification: Fine-loamy, mixed, superactive, mesic Typic Endoaquolls

Typical Pedon

Selma loam, 0 to 2 percent slopes; at an elevation of 656 feet; 52 feet south and 160 feet west of the northeast corner of sec. 18, T. 28 N., R. 10 E.; Iroquois County, Illinois; USGS Piper City Northeast topographic quadrangle; lat. 40 degrees 54 minutes 35 seconds N. and long. 88 degrees 06 minutes 43 seconds W., NAD 27:

Ap—0 to 6 inches; black (10YR 2/1) loam, dark gray (10YR 4/1) dry; weak fine and medium granular structure; friable; common very fine and fine roots; neutral; gradual smooth boundary.
A—6 to 13 inches; black (10YR 2/1) clay loam, dark gray (10YR 4/1) dry; weak fine subangular blocky structure; friable; common fine roots; neutral; gradual wavy boundary.
Btg1—13 to 19 inches; dark grayish brown (2.5Y 4/2) clay loam; moderate fine and medium subangular blocky structure; friable; common fine roots; many prominent very dark gray (2.5Y 3/1) organo-clay films on faces of peds and in pores; few fine distinct yellowish brown (10YR 5/4) masses of iron in the matrix; neutral; gradual wavy boundary.
Btg2—19 to 28 inches; grayish brown (2.5Y 5/2) loam; moderate medium prismatic structure parting to moderate medium subangular blocky; friable; common fine roots; many prominent dark gray (2.5Y 4/1) clay films on faces of peds; few fine light olive brown (2.5Y 5/4) iron and manganese nodules throughout; common medium distinct olive brown (2.5Y 4/4) masses of iron in the matrix; slightly alkaline; gradual wavy boundary.

Btg3—28 to 39 inches; grayish brown (2.5Y 5/2) loam; weak fine and medium subangular blocky structure; friable; common fine roots; few distinct dark gray (2.5Y 4/1) clay films on faces of peds; black (N 2.5/) krotovina from a depth of 30 inches to a depth of 39 inches; few fine dark yellowish brown (10YR 4/6) iron and manganese nodules throughout; few fine prominent light olive brown (2.5Y 5/6) masses of iron in the matrix; slightly alkaline; gradual wavy boundary.

BCtg—39 to 44 inches; grayish brown (2.5Y 5/2) loam; weak medium subangular blocky structure; friable; few very fine roots; few faint dark gray (2.5Y 4/1) clay films on faces of peds; few fine dark yellowish brown (10YR 4/6) iron and manganese nodules throughout; few fine prominent light olive brown (2.5Y 5/6) masses of iron in the matrix; strongly effervescent; slightly alkaline; gradual wavy boundary.

Cg1—44 to 54 inches; 55 percent dark gray (2.5Y 4/1), 35 percent gray (2.5Y 5/1), and 10 percent light yellowish brown (2.5Y 6/4), stratified sandy loam and loamy sand; massive in the sandy loam and single grain in the loamy sand; friable in the sandy loam and loose in the loamy sand; few very fine roots; very strongly effervescent; moderately alkaline; gradual wavy boundary.

Cg2—54 to 80 inches; 45 percent dark gray (2.5Y 4/1), 45 percent gray (2.5Y 5/1), and 10 percent light olive brown (2.5Y 5/6), stratified silt loam, sandy loam, and loamy sand; massive in the silt loam and sandy loam and single grain in the loamy sand; friable; few very fine roots; strongly effervescent; moderately alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 24 inches
Depth to carbonates: More than 30 inches
Thickness of the solum: 35 to 55 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—loam or clay loam

Bg, Btg, or BCg horizon:
Hue—10YR, 2.5Y, 5Y, or N
Value—4 to 6
Chroma—0 to 2
Texture—loam, clay loam, silt loam, or sandy loam
Content of gravel—less than 10 percent

Cg or C horizon:
Hue—10YR, 2.5Y, or 5Y
Value—4 to 6
Chroma—1 to 6
Texture—stratified sandy loam, loam, silt loam, or loamy sand
Content of gravel—less than 15 percent

125A—Selma loam, 0 to 2 percent slopes

Setting

Landform: Outwash plains
Position on the landform: Toeslopes

Map Unit Composition

Selma and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have more sand in the upper part

Dissimilar soils:
- Somewhat poorly drained soils on footslopes

Properties and Qualities of the Selma Soil

Parent material: Outwash
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 11.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 3.0 to 5.0 percent
Shrink-swell potential: Moderate
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Deepest ponding: 0.2 foot, January through May
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Negligible
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained
Hydric soil status: Hydric

Sparta Series

Taxonomic classification: Sandy, mixed, mesic Entic Hapludolls

Typical Pedon

Sparta loamy sand, 0 to 2 percent slopes; 2,150 feet north and 1,939 feet east of the southwest corner of sec. 20, T. 23 N., R. 10 E.; Ogle County, Illinois; USGS Daysville topographic quadrangle; lat. 41 degrees 57 minutes 58 seconds N. and long. 89 degrees 22 minutes 13 seconds W., NAD 27:

A1—0 to 10 inches; very dark gray (10YR 3/1) loamy sand, grayish brown (10YR 5/2) dry; weak medium subangular blocky structure parting to moderate very fine granular; very friable; many fine roots throughout; neutral; clear smooth boundary.

A2—10 to 17 inches; very dark grayish brown (10YR 3/2) loamy sand, grayish brown (10YR 5/2) dry; very weak medium and coarse subangular blocky structure parting to moderate very fine granular; very friable; common fine roots throughout; neutral; clear smooth boundary.

Bw1—17 to 24 inches; dark yellowish brown (10YR 4/4) sand; weak medium and coarse subangular blocky structure; very friable; few fine roots throughout; few distinct very dark grayish brown (10YR 3/2) organic coatings and few faint dark brown (10YR 3/3) clay bridging between sand grains; strongly acid; clear smooth boundary.

Bw2—24 to 31 inches; brown (7.5YR 5/4) sand; weak medium and coarse subangular blocky structure; very friable; few fine roots throughout; moderately acid; clear smooth boundary.
C—31 to 60 inches; reddish yellow (7.5YR 6/6) sand; single grain; loose; moderately acid.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches

Ap or A horizon:
Hue—7.5YR or 10YR
Value—2 or 3
Chroma—1 or 2
Texture—fine sand, sand, loamy fine sand, or loamy sand

Bw horizon:
Hue—7.5YR or 10YR
Value—3 to 6
Chroma—3 to 6
Texture—fine sand, sand, loamy sand, or loamy fine sand

C horizon:
Hue—7.5YR or 10YR
Value—4 to 6
Chroma—3 to 6
Texture—fine sand or sand

88A—Sparta loamy sand, 0 to 2 percent slopes

Setting

Landform: Stream terraces
Position on the landform: Summits

Map Unit Composition

Sparta and similar soils: 91 percent
Dissimilar soils: 9 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have a dark surface soil more than 24 inches thick
- Soils that have more gravel in the substratum
- Soils that have limestone bedrock within a depth of 60 inches
- Soils that have more clay in the surface layer and subsoil
- Soils that have a dark surface soil less than 10 inches thick

Dissimilar soils:
- The somewhat poorly drained Watseka soils on footslopes

Properties and Qualities of the Sparta Soil

Parent material: Sandy outwash
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid

Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 5.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: High

Interpretive Groups

Land capability classification: 4s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

88B—Sparta loamy sand, 1 to 6 percent slopes

Setting

Landform: Stream terraces
Position on the landform: Shoulders and summits

Map Unit Composition

Sparta and similar soils: 91 percent
Dissimilar soils: 9 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have a dark surface soil more than 24 inches thick
- Soils that have more gravel in the substratum
- Soils that have limestone bedrock within a depth of 60 inches
- Soils that have more clay in the surface layer and subsoil
- Soils that have a dark surface soil less than 10 inches thick

Dissimilar soils:
- The somewhat poorly drained Watseka soils on footslopes

Properties and Qualities of the Sparta Soil

Parent material: Outwash and/or eolian sands
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 5.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete

Surface runoff class: Very low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: High

Interpretive Groups

Land capability classification: 4s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

88C—Sparta loamy sand, 6 to 12 percent slopes

Setting

Landform: Stream terraces
Position on the landform: Backslopes and shoulders

Map Unit Composition

Sparta and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have a dark surface soil more than 24 inches thick
- Soils that have more gravel in the substratum
- Soils that have limestone bedrock within a depth of 60 inches
- Soils that have more clay in the surface layer and subsoil
- Soils that have a dark surface soil less than 10 inches thick

Dissimilar soils:
- The somewhat poorly drained Watseka soils on footslopes

Properties and Qualities of the Sparta Soil

Parent material: Sandy outwash and/or eolian sands
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 5.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: High

Interpretive Groups

Land capability classification: 6s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

88E—Sparta loamy sand, 12 to 20 percent slopes

Setting

Landform: Stream terraces
Position on the landform: Shoulders and backslopes

Map Unit Composition

Sparta and similar soils: 99 percent
Dissimilar soils: 1 percent

Minor Components

Similar soils:
- Soils that have a lighter colored surface layer
- Soils that have a dark surface soil more than 24 inches thick
- Soils that have more gravel in the substratum
- Soils that have limestone bedrock within a depth of 60 inches
- Soils that have more clay in the surface layer and subsoil
- Soils that have a dark surface soil less than 10 inches thick

Dissimilar soils:
- The somewhat poorly drained Watseka soils on footslopes

Properties and Qualities of the Sparta Soil

Parent material: Sandy outwash and/or eolian sands
Drainage class: Excessively drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 4.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: High

Interpretive Groups

Land capability classification: 7s
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Strawn Series

Taxonomic classification: Fine-loamy, mixed, active, mesic Typic Hapludalfs

Typical Pedon

Strawn loam, 18 to 60 percent slopes; 1,627 feet south and 2,225 feet east of the northwest corner of sec. 31, T. 16 N., R. 5 W.; Rock Island County, Illinois; USGS Blanchard Island topographic quadrangle; lat. 41 degrees 20 minutes 34 seconds N. and long. 90 degrees 00 minutes 27 seconds W., NAD 27:

A—0 to 6 inches; very dark grayish brown (10YR 3/2) loam; strong very fine and fine granular structure; friable; slightly acid; clear smooth boundary.
E—6 to 12 inches; brown (10YR 4/3) and very dark grayish brown (10YR 3/2) loam; moderate fine and medium subangular blocky structure; friable; moderately acid; clear smooth boundary.
Bt—12 to 23 inches; dark yellowish brown (10YR 4/4) clay loam; weak medium and coarse subangular blocky structure; friable; few distinct dark brown (10YR 3/3) clay films on faces of peds; neutral; gradual smooth boundary.
C—23 to 50 inches; yellowish brown (10YR 5/4) loam; massive; violently effervescent; moderately alkaline.

Range in Characteristics

Depth to the base of the argillic horizon: 16 to 24 inches
Depth to carbonates: 14 to 24 inches

Ap or A horizon:
Hue—10YR
Value—3 to 5
Chroma—2 to 4
Texture—loam or silt loam

E and/or BE horizon (where present):
Hue—10YR
Value—3 to 5
Chroma—2 to 4
Texture—silt loam or loam

Bt and/or BC horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 or 4
Texture—clay loam, silty clay loam, or loam

C horizon:
Hue—7.5YR, 10YR, or 2.5Y
Value—5 or 6
Chroma—2 to 6
Texture—loam, clay loam, silt loam, or fine sandy loam

224C2—Strawn silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Strawn and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more than 20 inches of loess over till
- Soils that are not calcareous within a depth of 24 inches

Properties and Qualities of the Strawn Soil

Parent material: Calcareous loamy till

Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

224D2—Strawn silt loam, 10 to 18 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Strawn and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more than 20 inches of loess over till
- Soils that are not calcareous within a depth of 24 inches

Properties and Qualities of the Strawn Soil

Parent material: Calcareous loamy till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

224D3—Strawn clay loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Strawn and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more than 20 inches of loess over till
- Soils that are not calcareous within a depth of 24 inches

Properties and Qualities of the Strawn Soil

Parent material: Calcareous loamy till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

224F2—Strawn silt loam, 18 to 35 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Strawn and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have more than 20 inches of loess over till
- Soils that are not calcareous within a depth of 24 inches

Properties and Qualities of the Strawn Soil

Parent material: Calcareous loamy till
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.6 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Moderate for steel and low for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Tell Series

Taxonomic classification: Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludalfs

Typical Pedon

Tell silt loam, 0 to 2 percent slopes; 730 feet south and 2,190 feet west of the northeast corner of sec. 7, T. 18 N., R. 6 E.; Bureau County, Illinois; USGS Yorktown topographic quadrangle; lat. 41 degrees 34 minutes 02 seconds N. and long. 89 degrees 50 minutes 55 seconds W., NAD 27:

Ap—0 to 9 inches; dark brown (10YR 3/3) silt loam, pale brown (10YR 6/3) dry; weak medium granular structure; friable; few fine roots throughout; moderately acid; abrupt smooth boundary.

E—9 to 14 inches; brown (10YR 5/3) silt loam; moderate thin platy structure; friable; few fine roots throughout; few faint dark grayish brown (10YR 4/2) organic coatings on faces of peds; moderately acid; abrupt smooth boundary.

BE—14 to 20 inches; yellowish brown (10YR 5/4) silt loam; moderate medium subangular blocky structure; friable; few fine roots between peds; few faint dark brown (10YR 3/3) organic coatings on faces of peds; moderately acid; clear smooth boundary.

Bt—20 to 30 inches; yellowish brown (10YR 5/4) silt loam; moderate medium subangular blocky structure; friable; few fine roots between peds; common faint dark yellowish brown (10YR 4/4) clay films on faces of peds; moderately acid; clear smooth boundary.

2BC—30 to 34 inches; yellowish brown (10YR 5/4) sandy loam; moderate medium subangular blocky structure; friable; few fine roots between peds; few faint dark yellowish brown (10YR 4/4) clay films on faces of peds; moderately acid; clear smooth boundary.
2C—34 to 60 inches; yellowish brown (10YR 5/4) loamy sand; single grain; loose; moderately acid.

Range in Characteristics

Thickness of the loess: 20 to 36 inches
Thickness of the solum: 20 to 36 inches

Ap or A horizon:
Hue—10YR
Value—3 to 5
Chroma—2 to 5
Texture—silt loam

E horizon (where present):
Hue—10YR
Value—4 or 5
Chroma—2 to 4
Texture—silt loam

Bt horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 or 4
Texture—silty clay loam or silt loam

2B horizon:
Hue—7.5YR or 10YR
Value—3 to 5
Chroma—3 to 6
Texture—sandy loam, loam, or sandy clay loam

2C horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—4 to 8
Texture—sand or loamy sand

565B—Tell silt loam, 2 to 5 percent slopes

Setting

Landform: Outwash plains
Position on the landform: Shoulders and summits

Map Unit Composition

Tell and similar soils: 93 percent
Dissimilar soils: 7 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that contain more sand throughout

- Soils that have more clay in the subsoil
- Soils that have more than 40 inches of loess over the underlying material

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Potential for frost action: High
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

565C2—Tell silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Outwash plains
Position on the landform: Backslopes and shoulders

Map Unit Composition

Tell and similar soils: 92 percent
Dissimilar soils: 8 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that contain more sand throughout
- Soils that have more clay in the subsoil
- Soils that have more than 40 inches of loess over the underlying material

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.2 inches to a depth of 60 inches

Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

565D2—Tell silt loam, 10 to 18 percent slopes, eroded

Setting

Landform: Outwash plains
Position on the landform: Shoulders and backslopes

Map Unit Composition

Tell and similar soils: 99 percent
Dissimilar soils: 1 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that contain more sand throughout
- Soils that have more clay in the subsoil
- Soils that have more than 40 inches of loess over the underlying material

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium

Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

565D3—Tell silt loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Outwash plains
Position on the landform: Backslopes and shoulders

Map Unit Composition

Tell and similar soils: 99 percent
Dissimilar soils: 1 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that contain more sand throughout
- Soils that have more clay in the subsoil
- Soils that have more than 40 inches of loess over the underlying material

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

565F2—Tell silt loam, 18 to 35 percent slopes, eroded

Setting

Landform: Outwash plains or ground moraines
Position on the landform: Backslopes and shoulders

Map Unit Composition

Tell and similar soils: 99 percent
Dissimilar soils: 1 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that contain more sand throughout
- Soils that have more clay in the subsoil
- Soils that have more than 40 inches of loess over the underlying material

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

952C2—Tell-Lamont complex, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Summits and shoulders

Map Unit Composition

Tell and similar soils: 46 percent
Lamont and similar soils: 44 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that have more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: Tell—3e; Lamont—3e
Prime farmland category: Not prime farmland
Hydric soil status: Tell—not hydric; Lamont—not hydric

952D2—Tell-Lamont complex, 10 to 18 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Tell and similar soils: 46 percent
Lamont and similar soils: 44 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that have more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low

Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: Tell—3e; Lamont—4e
Prime farmland category: Not prime farmland
Hydric soil status: Tell—not hydric; Lamont—not hydric

952D3—Tell-Lamont complex, 10 to 18 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Tell and similar soils: 46 percent
Lamont and similar soils: 44 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that have more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.5 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.2 inches to a depth of 60 inches

Content of organic matter in the surface layer: 0.5 to 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: High
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: Tell—4e; Lamont—6e
Prime farmland category: Not prime farmland
Hydric soil status: Tell—not hydric; Lamont—not hydric

952F2—Tell-Lamont complex, 18 to 35 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Tell and similar soils: 46 percent
Lamont and similar soils: 44 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have less than 20 inches of loess on the surface
- Soils that have more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes
- Soils that are calcareous

Properties and Qualities of the Tell Soil

Parent material: Loess over outwash or eolian sands
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Moderate
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Moderate for steel and concrete
Surface runoff class: High

Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Lamont Soil

Parent material: Eolian deposits
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderately rapid
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Moderately high

Interpretive Groups

Land capability classification: Tell—6e; Lamont—7e
Prime farmland category: Not prime farmland
Hydric soil status: Tell—not hydric; Lamont—not hydric

Timula Series

Taxonomic classification: Coarse-silty, mixed, superactive, mesic Typic Eutrudepts

Typical Pedon

Timula silt loam, in an area of Seaton-Timula silt loams, 18 to 30 percent slopes, eroded; 1,080 feet east and 2,000 feet south of the northwest corner of sec. 29, T. 22 N., R. 5 E.; Whiteside County, Illinois; USGS Morrison topographic quadrangle; lat. 41 degrees 52 minutes 03 seconds N. and long. 89 degrees 57 minutes 19 seconds W., NAD 27:

Ap—0 to 6 inches; brown (10YR 4/3) silt loam, pale brown (10YR 6/3) dry; weak fine subangular blocky structure parting to weak medium granular; friable; few fine roots throughout; few dark yellowish brown (10YR 4/4) fragments of subsoil material; neutral; abrupt smooth boundary.

Bw1—6 to 12 inches; yellowish brown (10YR 5/4) silt loam; moderate medium and fine subangular blocky structure; friable; few fine roots between peds; few faint brown (10YR 4/3) organic coatings and dark yellowish brown (10YR 4/4) clay films on faces of peds; neutral; clear smooth boundary.

Bw2—12 to 23 inches; yellowish brown (10YR 5/4) silt loam; weak coarse and medium subangular blocky structure; friable; few fine roots between peds; common faint dark yellowish brown (10YR 4/4) clay films on faces of peds; neutral; clear smooth boundary.

BC—23 to 28 inches; yellowish brown (10YR 5/4) silt loam; weak coarse angular blocky structure; friable; few fine distinct yellowish brown (10YR 5/6) masses of iron and light brownish gray (10YR 6/2) iron depletions in the matrix; slightly effervescent; slightly alkaline; gradual smooth boundary.

C—28 to 60 inches; light yellowish brown (2.5Y 6/4) silt loam; massive; friable; common fine prominent yellowish brown (10YR 5/6) masses of iron and common fine distinct light gray (10YR 7/2) iron depletions in the matrix; few fine soft dark brown (7.5YR 3/2) masses of iron-manganese oxides in the matrix; strongly effervescent; slightly alkaline.

Range in Characteristics

Thickness of the solum: 18 to 40 inches
Depth to carbonates: 18 to 40 inches

Ap or A horizon:
Hue—10YR
Value—3 or 4
Chroma—1 to 3
Texture—silt loam or silt

E horizon (where present):
Hue—10YR
Value—4 or 5
Chroma—2 to 4
Texture—silt loam or silt

Bw horizon:
Hue—10YR
Value—4 to 6
Chroma—3 to 6
Texture—silt loam or silt

BC, Bk, or C horizon:
Hue—10YR, 2.5Y, or 5Y
Value—5 or 6
Chroma—2 to 4
Texture—silt loam or silt

943F2—Seaton-Timula silt loams, 18 to 35 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Seaton and similar soils: 55 percent
Timula and similar soils: 45 percent

Minor Components

Similar soils:
- Soils that are calcareous within a depth of 20 inches
- Soils that are not calcareous within a depth of 40 inches
- Soils that contain more sand

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate

Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.5 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Timula Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Seaton—6e; Timula—6e
Prime farmland category: Not prime farmland
Hydric soil status: Seaton—not hydric; Timula—not hydric

943G2—Seaton-Timula silt loams, 35 to 60 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Seaton and similar soils: 55 percent
Timula and similar soils: 45 percent

Minor Components

Similar soils:
- Soils that contain more sand
- Soils that are calcareous within a depth of 20 inches
- Soils that are not calcareous within a depth of 40 inches

Properties and Qualities of the Seaton Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Properties and Qualities of the Timula Soil

Parent material: Loess
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 12.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: Seaton—7e; Timula—7e
Prime farmland category: Not prime farmland
Hydric soil status: Seaton—not hydric; Timula—not hydric

Wakeland Series

Taxonomic classification: Coarse-silty, mixed, superactive, nonacid, mesic Aeric Fluvaquents

Typical Pedon

Wakeland silt loam, 0 to 2 percent slopes, frequently flooded; 1,010 feet west and 2,040 feet south of the northeast corner of sec. 24, T. 22 N., R. 5 E.; Whiteside County, Illinois; USGS Milledgeville topographic quadrangle; lat. 41 degrees 52 minutes 55 seconds N. and long. 89 degrees 51 minutes 56 seconds W., NAD 27:

Ap—0 to 9 inches; dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; massive; friable; many thin strata of yellowish brown (10YR 5/4) silt loam; neutral; clear smooth boundary.
C1—9 to 17 inches; brown (10YR 5/3) silt loam; massive; friable; many thin strata of yellowish brown (10YR 5/4) and dark grayish brown (10YR 4/2) silt loam; few fine soft dark brown (7.5YR 3/2) masses of iron-manganese oxides; few fine distinct yellowish brown (10YR 5/6) masses of iron in the matrix; neutral; clear wavy boundary.
C2—17 to 25 inches; dark grayish brown (10YR 4/2) silt loam; massive; very friable; many thin strata of yellowish brown (10YR 5/4), very dark gray (10YR 3/1), and pale brown (10YR 6/3) silt loam; common fine soft dark brown (7.5YR 3/2) masses of iron-manganese; few fine faint grayish brown (10YR 5/2) iron depletions and few fine prominent yellowish brown (10YR 5/8) masses of iron in the matrix; neutral; clear wavy boundary.
C3—25 to 40 inches; yellowish brown (10YR 5/4) silt loam; massive; very friable; many thin strata of very dark gray (10YR 3/1) and dark grayish brown (10YR 4/2) silt loam; few very dark grayish brown (10YR 3/2) wormcasts; few distinct dark grayish brown (10YR 4/2) organic coatings in root channels; few fine soft dark brown (7.5YR 3/2) masses of iron-manganese; few fine prominent strong brown (7.5YR 5/6) and few fine faint pale brown (10YR 6/3) masses of iron in the matrix; neutral; clear wavy boundary.
C4—40 to 60 inches; brown (10YR 5/3) silt loam; massive; very friable; many thin strata of dark grayish brown (10YR 4/2), yellowish brown (10YR 5/4), and very dark gray (10YR 3/1) silt loam; few fine soft dark brown (7.5YR 3/2) masses of iron-manganese; few fine distinct yellowish brown (10YR 5/6) and few fine faint pale brown (10YR 6/3) masses of iron in the matrix; neutral.

Range in Characteristics

Ap horizon:
Hue—10YR
Value—4 or 5
Chroma—2 or 3
Texture—silt loam

C horizon:
Hue—7.5YR, 10YR, or 2.5Y
Value—4 to 6
Chroma—1 to 6
Texture—silt loam

3333A—Wakeland silt loam, 0 to 2 percent slopes, frequently flooded

Setting

Landform: Flood plains

Map Unit Composition

Wakeland and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a black buried surface layer within a depth of 40 inches

- Soils that are calcareous
- Soils that contain more sand and less silt

Properties and Qualities of the Wakeland Soil

Parent material: Alluvium
Drainage class: Somewhat poorly drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 3.0 percent
Shrink-swell potential: Low
Depth and months of the highest apparent seasonal high water table: 0.5 foot, January through May
Frequency and most likely period of flooding: Frequent, November through June
Potential for frost action: High
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2w
Prime farmland category: Prime farmland where drained and either protected from flooding or not frequently flooded during the growing season
Hydric soil status: Not hydric

W—Water

- This map unit consists of natural water bodies and impoundments generally used for livestock water supplies, as wetland wildlife habitat, or for recreational purposes.

Waukegan Series

Taxonomic classification: Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludolls
Taxadjunct features: The Waukegan soil in map unit 564C2 has a thinner dark surface layer than is defined as the range for the series. This soil is classified as a fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Dystric Eutrudept.

Typical Pedon

Waukegan silt loam, 0 to 2 percent slopes; 1,744 feet north and 450 feet east of the southwest corner of sec. 31, T. 18 N., R. 7 E.; Bureau County, Illinois; USGS New Bedford topographic quadrangle; lat. 41 degrees 30 minutes 04 seconds N. and long. 89 degrees 44 minutes 29 seconds W., NAD 27:

Ap—0 to 9 inches; very dark brown (10YR 2/2) silt loam, dark grayish brown (10YR 4/2) dry; moderate fine granular structure; friable; common very fine roots throughout; moderately acid; abrupt smooth boundary.
A—9 to 17 inches; very dark brown (10YR 2/2) silt loam, dark grayish brown (10YR 4/2) dry; moderate fine subangular blocky structure parting to moderate medium granular; friable; common very fine roots throughout; slightly acid; clear smooth boundary.

Bt1—17 to 22 inches; brown (10YR 4/3) silt loam; moderate medium subangular blocky structure; friable; common very fine roots between peds; few faint very dark brown (10YR 2/2) and dark brown (10YR 3/3) organo-clay films on faces of peds; slightly acid; clear smooth boundary.
Bt2—22 to 30 inches; yellowish brown (10YR 5/4) silt loam; moderate medium subangular blocky structure; friable; few very fine roots between peds; many faint dark yellowish brown (10YR 4/4) clay films on faces of peds; slightly acid; abrupt smooth boundary.
2BC—30 to 34 inches; yellowish brown (10YR 5/4) sandy loam; weak medium subangular blocky structure; friable; few very fine roots between peds; common faint dark yellowish brown (10YR 4/4) clay films on faces of peds; moderately acid; abrupt smooth boundary.
2C—34 to 60 inches; yellowish brown (10YR 5/4) gravelly sand; single grain; loose; about 32 percent pebbles and cobblestones; strong brown (7.5YR 5/6) iron bands between depths of 45 and 47 inches; slightly acid.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 20 inches
Thickness of the loess: 20 to 40 inches
Depth to sand and gravel: 20 to 40 inches
Depth to free carbonates: 40 to 70 inches
Thickness of the solum: 30 to 60 inches

Ap or A horizon:
Hue—10YR
Value—2 or 3
Chroma—1 or 2
Texture—silt loam

Bt horizon:
Hue—10YR or 2.5Y
Value—3 to 5
Chroma—3 to 5
Texture—silt loam

2B horizon:
Hue—10YR or 2.5Y
Value—4 to 6
Chroma—3 to 6
Texture—coarse sand, sand, loamy coarse sand, loamy sand, or sandy loam

2C horizon:
Hue—7.5YR, 10YR, or 2.5Y
Value—4 to 6
Chroma—2 to 6
Texture—sand or coarse sand

564B—Waukegan silt loam, 2 to 5 percent slopes

Setting

Landform: Outwash plains
Position on the landform: Summits and shoulders

Map Unit Composition

Waukegan and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have a thinner dark surface layer
- Soils that have more than 40 inches of loess over the underlying sandy material
- Soils that have more sand in the surface layer and subsoil

Dissimilar soils:
- The somewhat poorly drained Joyce soils on footslopes

Properties and Qualities of the Waukegan Soil

Parent material: Loess over outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 5.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: Low
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

564C2—Waukegan silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Outwash plains
Position on the landform: Backslopes

Map Unit Composition

Waukegan and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a thinner dark surface layer
- Soils that have more than 40 inches of loess over the underlying sandy material
- Soils that have more sand in the surface layer and subsoil
- Soils that have a lighter colored surface layer
- Soils that have a dark surface layer more than 10 inches thick

Properties and Qualities of the Waukegan Soil

Parent material: Loess over outwash
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 7.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 5.0 percent
Shrink-swell potential: Low
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Low
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Woodbine Series

Taxonomic classification: Fine-loamy, mixed, active, mesic Typic Hapludalfs

Typical Pedon

Woodbine silt loam, 2 to 5 percent slopes; 273 feet west and 1,410 feet south of the northeast corner of sec. 11, T. 27 N., R. 7 E.; Stephenson County, Illinois; USGS Freeport West topographic quadrangle; lat. 42 degrees 21 minutes 20 seconds N. and long. 89 degrees 39 minutes 02 seconds W., NAD 27:

A—0 to 4 inches; very dark gray (10YR 3/1) silt loam, gray (10YR 5/1) dry; moderate fine granular structure; friable; slightly acid; clear smooth boundary.
E—4 to 9 inches; mixed brown (10YR 5/3) and very dark gray (10YR 3/1) silt loam; brown (10YR 5/3) when kneaded; moderate thin platy structure; friable; slightly acid; gradual smooth boundary.
BE—9 to 15 inches; dark yellowish brown (10YR 4/4) silty clay loam; moderate fine and medium subangular blocky structure; friable; moderately acid; clear smooth boundary.
2Bt1—15 to 21 inches; brown (7.5YR 4/4) silty clay loam with about 10 percent sand; weak fine subangular blocky structure; firm; common distinct dark brown (7.5YR 3/2) clay films on faces of peds; strongly acid; abrupt smooth boundary.
2Bt2—21 to 37 inches; brown (7.5YR 4/4) clay loam; moderate medium subangular blocky structure; firm; many distinct dark brown (7.5YR 3/2) clay films on the faces of peds; strongly acid; clear smooth boundary.
3Bt3—37 to 41 inches; dark reddish brown (5YR 3/4) gravelly clay; weak coarse angular blocky structure; firm; common distinct dark reddish brown (5YR 3/2) clay films on faces of peds; about 20 percent chert fragments; moderately acid; abrupt wavy boundary.
R—41 inches; level bedded dolomitic limestone.

Range in Characteristics

Thickness of the loess: 10 to 30 inches
Thickness of the glacial drift: 20 to 35 inches
Thickness of the residuum: 0 to 5 inches
Thickness of the solum: 40 to 60 inches

Ap or A horizon:
Hue—10YR
Value—2 to 5
Chroma—1 to 3
Texture—silt loam or loam

E horizon:
Hue—10YR
Value—4 or 5
Chroma—1 to 3
Texture—silt loam or loam

2Bt horizon:
Hue—2.5YR, 5YR, or 7.5YR
Value—3 to 5
Chroma—3 to 5
Texture—clay loam, silty clay loam, loam, sandy clay loam, or sandy loam

3Bt horizon:
Hue—5YR
Value—3 or 4
Chroma—3 to 6
Texture—silty clay, clay, gravelly silty clay, or gravelly clay

410C2—Woodbine silt loam, 5 to 10 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Woodbine and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface layer
- Soils that have 10 to 20 percent chert fragments in the surface layer and the upper part of the subsoil
- Soils that have more sand in the surface layer and subsoil
- Soils that have silt loam throughout the middle part of the subsoil
- Soils that have limestone bedrock within a depth of 40 inches

Dissimilar soils:
- The well drained Pecatonica soils on summits and shoulders
- The well drained Ross soils in drainageways

Properties and Qualities of the Woodbine Soil

Parent material: Loess over till over residuum weathered from limestone
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 8.2 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

410D2—Woodbine silt loam, 10 to 18 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Woodbine and similar soils: 85 percent
Dissimilar soils: 15 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface layer
- Soils that have 10 to 20 percent chert fragments in the surface layer and the upper part of the subsoil
- Soils that have more sand in the surface layer and subsoil
- Soils that have silt loam throughout the middle part of the subsoil
- Soils that have limestone bedrock within a depth of 40 inches

Dissimilar soils:
- The well drained Pecatonica soils on summits, backslopes, and shoulders
- Well drained, loamy soils that have a thick dark surface layer; in drainageways

Properties and Qualities of the Woodbine Soil

Parent material: Loess over till over residuum weathered from limestone
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very slow or slow

Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 8.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: High for steel and low for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

410D3—Woodbine silty clay loam, 10 to 18 percent slopes, severely eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Woodbine and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface layer
- Soils that have 10 to 20 percent chert fragments in the surface layer and the upper part of the subsoil
- Soils that have more sand in the surface layer and subsoil
- Soils that have silt loam throughout the middle part of the subsoil
- Soils that have limestone bedrock within a depth of 40 inches

Dissimilar soils:
- The well drained Pecatonica soils on summits and shoulders
- Well drained, loamy soils in drainageways

Properties and Qualities of the Woodbine Soil

Parent material: Loess over till over residuum weathered from limestone
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 7.3 inches to a depth of 60 inches
Content of organic matter in the surface layer: 0.2 to 1.0 percent
Shrink-swell potential: High
Flooding: None

Accelerated erosion: This soil has lost more than 75 percent of the original surface layer. The plow layer consists largely of subsoil material.
Potential for frost action: Moderate
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 4e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

410F2—Woodbine silt loam, 18 to 35 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Woodbine and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface layer
- Soils that have 10 to 20 percent chert fragments in the surface layer and the upper part of the subsoil
- Soils that have more sand in the surface layer and subsoil
- Soils that have silt loam throughout the middle part of the subsoil
- Soils that have limestone bedrock at a depth of 20 to 40 inches

Dissimilar soils:
- The well drained Pecatonica soils on summits and shoulders
- Well drained, loamy soils that have a thick dark surface layer; in drainageways

Properties and Qualities of the Woodbine Soil

Parent material: Loess over till over residuum weathered from limestone
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Slow
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 7.4 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: High

Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 6e
Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

410G2—Woodbine silt loam, 35 to 60 percent slopes, eroded

Setting

Landform: Ground moraines
Position on the landform: Backslopes

Map Unit Composition

Woodbine and similar soils: 90 percent
Dissimilar soils: 10 percent

Minor Components

Similar soils:
- Soils that have a thicker dark surface layer
- Soils that have 10 to 20 percent chert fragments in the surface layer and the upper part of the subsoil
- Soils that have more sand in the surface layer and subsoil
- Soils that have silt loam throughout the middle part of the subsoil
- Soils that have limestone bedrock at a depth of 20 to 40 inches

Dissimilar soils:
- The well drained Pecatonica soils on summits and shoulders
- Well drained, loamy soils that have a thick dark surface layer; in drainageways

Properties and Qualities of the Woodbine Soil

Parent material: Loess over till over residuum weathered from limestone
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Very slow or slow
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Available water capacity: About 7.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 1.0 to 2.0 percent
Shrink-swell potential: High
Flooding: None
Accelerated erosion: This soil has lost 25 to 75 percent of the original surface layer. In most areas the subsoil is mixed with the surface layer.
Potential for frost action: Moderate
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: High
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 7e

Prime farmland category: Not prime farmland
Hydric soil status: Not hydric

Worthen Series

Taxonomic classification: Fine-silty, mixed, superactive, mesic Cumulic Hapludolls

Typical Pedon

Worthen silt loam, 2 to 5 percent slopes; at an elevation of 465 feet; 160 feet south and 640 feet west of the northeast corner of sec. 26, T. 13 N., R. 13 W.; Scott County, Illinois; USGS Bedford topographic quadrangle; lat. 39 degrees 33 minutes 00 seconds N. and long. 90 degrees 30 minutes 33 seconds W., NAD 27:

Ap—0 to 9 inches; very dark grayish brown (10YR 3/2) silt loam, grayish brown (10YR 5/2) dry; weak fine granular structure; friable; common very fine and fine roots; neutral; abrupt smooth boundary.
A—9 to 20 inches; dark brown (10YR 3/3) silt loam, brown (10YR 5/3) dry; weak medium granular structure; friable; few very fine and fine roots; common distinct very dark grayish brown (10YR 3/2) organic coatings on faces of peds; slightly acid; clear smooth boundary.
AB—20 to 29 inches; dark brown (10YR 3/3) silt loam, brown (10YR 5/3) dry; weak fine subangular blocky structure; friable; few very fine and fine roots; common distinct very dark grayish brown (10YR 3/2) organic coatings on faces of peds; neutral; clear smooth boundary.
Bw1—29 to 41 inches; brown (10YR 4/3) silt loam; weak fine subangular blocky structure; friable; few very fine and fine roots; common distinct dark brown (10YR 3/3) organic coatings on faces of peds, few distinct very dark grayish brown (10YR 3/2) organic coatings in root channels and/or pores and few distinct very pale brown (10YR 7/3) silt coatings on faces of peds; neutral; clear smooth boundary.
Bw2—41 to 64 inches; dark yellowish brown (10YR 4/4) silt loam; weak fine subangular blocky structure; friable; few very fine and fine roots; few distinct dark brown (10YR 3/3) organic coatings in root channels and/or pores and few distinct very pale brown (10YR 7/3) silt coatings on faces of peds; neutral; gradual smooth boundary.
C—64 to 80 inches; yellowish brown (10YR 5/4) silt loam; weak medium subangular blocky structure; friable; neutral.

Range in Characteristics

Thickness of the mollic epipedon: 24 to 36 inches
Depth to carbonates (if they occur): More than 50 inches
Depth to the base of the cambic horizon: 30 to 70 inches

Ap or A horizon:
Hue—7.5YR or 10YR
Value—2 or 3
Chroma—1 to 3
Texture—silt loam

Bw horizon (upper part):
Hue—7.5YR or 10YR
Value—3 or 4
Chroma—2 to 4
Texture—silt loam

Bw horizon (lower part):
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 6
Texture—silt loam

C horizon:
Hue—7.5YR or 10YR
Value—4 or 5
Chroma—3 to 6
Texture—silt loam

37A—Worthen silt loam, 0 to 2 percent slopes

Setting

Landform: Alluvial fans and stream terraces
Position on the landform: Footslopes

Map Unit Composition

Worthen and similar soils: 95 percent
Dissimilar soils: 5 percent

Minor Components

Similar soils:
- Soils that have a thinner dark surface layer
- Soils that have more sand in the lower part of the control section
- Soils that have more clay in the subsoil

Dissimilar soils:
- The somewhat poorly drained Littleton soils on footslopes

Properties and Qualities of the Worthen Soil

Parent material: Alluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.1 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 1
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

37B—Worthen silt loam, 2 to 5 percent slopes

Setting

Landform: Stream terraces and alluvial fans
Position on the landform: Shoulders and summits

Map Unit Composition

Worthen and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a thinner dark surface layer
- Soils that have more sand in the lower part of the control section
- Soils that have more clay in the subsoil

Properties and Qualities of the Worthen Soil

Parent material: Alluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Low
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 2e
Prime farmland category: Prime farmland
Hydric soil status: Not hydric

37C—Worthen silt loam, 5 to 10 percent slopes

Setting

Landform: Stream terraces
Position on the landform: Backslopes

Map Unit Composition

Worthen and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a thinner dark surface layer
- Soils that have more sand in the lower part of the control section
- Soils that have more clay in the subsoil

Properties and Qualities of the Worthen Soil

Parent material: Alluvium
Drainage class: Well drained
Slowest permeability within a depth of 40 inches: Moderate
Permeability below a depth of 60 inches: Moderate
Depth to restrictive feature: More than 80 inches
Available water capacity: About 13.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 4.0 percent
Shrink-swell potential: Low
Flooding: None
Potential for frost action: High
Hazard of corrosion: Low for steel and concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not hydric
Hydric soil status: Not hydric

Zwingle Series

Taxonomic classification: Fine, smectitic, mesic Typic Albaqualfs

Typical Pedon

Zwingle silt loam; about 1.5 miles south of Lansing; 30 feet east of road; about 470 feet south and 1,200 feet east of the northwest corner of sec. 5, T. 98 N., R. 2 W.; Allamakee County, Iowa; USGS Lansing topographic quadrangle; lat. 43 degrees 20 minutes 23 seconds N. and long. 91 degrees 13 minutes 32 seconds W., NAD 83:

A—0 to 15 cm (0 to 6 inches); dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; moderate fine granular structure; friable; moderately acid; abrupt smooth boundary.

E—15 to 33 cm (6 to 13 inches); light brownish gray (10YR 6/2) silt loam, light gray (N 7/) dry; weak medium platy structure; friable; strongly acid; abrupt smooth boundary.

Bt1—33 to 61 cm (13 to 24 inches); reddish brown (2.5YR 4/4) silty clay; strong fine angular blocky structure; very firm; common fine distinct grayish brown (10YR 5/2) iron depletions on faces of peds; common distinct brown (7.5YR 4/2) clay films on faces of peds; common light gray (10YR 7/1) silt coatings on faces of peds in the upper 3 to 5 cm (1 to 2 inches); strongly acid; gradual smooth boundary.

Bt2—61 to 81 cm (24 to 32 inches); yellowish red (5YR 4/6) and grayish brown (10YR 5/2) silty clay; strong fine subangular and angular blocky structure; very firm; common distinct brown (7.5YR 4/2) clay films; moderately acid; gradual smooth boundary.

Btg1—81 to 104 cm (32 to 41 inches); pinkish gray (7.5YR 6/2), gray (10YR 6/1), and reddish brown (5YR 5/3) silty clay; moderate fine subangular blocky structure; very firm; few distinct brown (7.5YR 4/2) clay films on faces of peds; slightly acid; clear smooth boundary.

Btg2—104 to 117 cm (41 to 46 inches); light brownish gray (10YR 6/2) and pinkish gray (7.5YR 6/2) silty clay loam; weak medium subangular blocky structure; firm; few distinct brown (7.5YR 4/2) clay films on faces of peds; some sand grains evident in the lower part; slightly acid; clear smooth boundary.

2Cg—117 to 152 cm (46 to 60 inches); grayish brown (10YR 5/2), stratified loam and bands of loamy sand; massive; friable; few thin gravel seams; slightly acid.

Range in Characteristics

Thickness of the lacustrine sediments: 3 1/2 to 5 feet
Thickness of the solum: 36 to 60 inches
Depth to carbonates: More than 48 inches

Ap or A horizon:
Hue—10YR
Value—4 or 5
Chroma—1 or 2
Texture—silt loam or silty clay loam

E horizon:
Hue—10YR or 7.5YR
Value—5 or 6
Chroma—1 or 2
Texture—silt loam

Bt horizon:
Hue—10R to 7.5YR
Value—4 to 6
Chroma—2 to 6
Texture—silty clay or clay

2C horizon:
Hue—10YR to 2.5Y
Value—4 to 6
Chroma—2
Texture—loam with strata of loamy sand

576A—Zwingle silt loam, 0 to 2 percent slopes

Setting

Landform: Terraces
Position on the landform: Summits

Map Unit Composition

Zwingle and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a gray subsoil
- Soils that have a seasonal high water table at a depth of more than 1 foot

Properties and Qualities of the Zwingle Soil

Parent material: Clayey lacustrine deposits
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Very slow
Permeability below a depth of 60 inches: Moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 9.0 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: High

Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Low
Susceptibility to water erosion: Low
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3w
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

576B—Zwingle silt loam, 2 to 5 percent slopes

Setting

Landform: Terraces
Position on the landform: Shoulders

Map Unit Composition

Zwingle and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a gray subsoil
- Soils that have a seasonal high water table at a depth of more than 1 foot

Properties and Qualities of the Zwingle Soil

Parent material: Clayey lacustrine deposits
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Very slow
Permeability below a depth of 60 inches: Moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.9 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: High
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: Medium
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

576C—Zwingle silt loam, 5 to 10 percent slopes

Setting

Landform: Terraces
Position on the landform: Backslopes

Map Unit Composition

Zwingle and similar soils: 100 percent

Minor Components

Similar soils:
- Soils that have a gray subsoil
- Soils that have a seasonal high water table at a depth of more than 1 foot

Properties and Qualities of the Zwingle Soil

Parent material: Clayey lacustrine deposits
Drainage class: Poorly drained
Slowest permeability within a depth of 40 inches: Very slow
Permeability below a depth of 60 inches: Moderately rapid
Depth to restrictive feature: More than 80 inches
Available water capacity: About 8.7 inches to a depth of 60 inches
Content of organic matter in the surface layer: 2.0 to 3.0 percent
Shrink-swell potential: High
Depth and months of the highest apparent seasonal high water table: At the surface, January through May
Flooding: None
Potential for frost action: Moderate
Hazard of corrosion: High for steel and moderate for concrete
Surface runoff class: High
Susceptibility to water erosion: Moderate
Susceptibility to wind erosion: Low

Interpretive Groups

Land capability classification: 3e
Prime farmland category: Not prime farmland
Hydric soil status: Hydric

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forestland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *well suited, moderately suited, poorly suited,* and *unsuited* or as *good, fair,* and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate

gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

General management needed for crops and pasture is suggested in this section. The estimated yields of the main crops and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and prime farmland is described.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading “Soil Series and Detailed Soil Map Units.” Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Yields per Acre

The average yields per acre that can be expected of the principal crops under a high level of management are shown in table 6. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents (Olsen and others, 2000). Available yield data from nearby counties and results of field trials and demonstrations also are considered (Fehrenbacher and others, 1978).

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control (fig. 9), and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in table 6 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Pasture and Hayland Interpretations

Under good management, proper grazing is essential for the production of high-quality forage, stand survival, and erosion control. Proper grazing helps plants to maintain sufficient and generally vigorous top growth during the growing season. Brush control is essential in many areas, and weed control generally is needed. Rotation grazing and pasture renovation also are important management practices.



Figure 9.—No-till practices leave crop residue on the surface and help to control erosion.

Yield estimates are often provided in animal unit months (AUM), or the amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

The local office of the Natural Resources Conservation Service or the Cooperative Extension Service can provide information about forage yields other than those shown in the yields table.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for forestland or for engineering purposes.

In the capability system, soils are generally grouped at three levels—capability class, subclass, and unit (USDA, 1961). Only class and subclass are used in this survey.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, forestland, or wildlife habitat.

The capability classification of the soils in this survey area is given in the section "Soil Series and Detailed Soil Map Units" and in the yields table.

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

A recent trend in land use in some parts of the survey area has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other

uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

About 107,853 acres, or about 36 percent of the survey area, meets the requirements for prime farmland.

The map units in the survey area that are considered prime farmland are listed in table 7. This list does not constitute a recommendation for a particular land use. On some soils included in the list, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures. The extent of each listed map unit is shown in table 5. The location is shown on the detailed soil maps. The soil qualities that affect use and management are described under the heading “Soil Series and Detailed Soil Map Units.”

Hydric Soils

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation (fig. 10).

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in “Soil Taxonomy” (Soil Survey Staff, 1999) and “Keys to Soil Taxonomy” (Soil Survey Staff, 2003) and in the “Soil Survey Manual” (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in “Field Indicators of Hydric Soils in the United States” (Hurt and others, 2002).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform. Table 8 lists the map units that include hydric soils, either as



Figure 10.—Wetland vegetation in an area of Edgington soils.

major components or as inclusions. The hydric soils listed in the table meet the definition of a hydric soil and have at least one of the hydric soil indicators. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
   A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
   B. are poorly drained or very poorly drained and have either:
      1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
      2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
      3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

Windbreaks and Environmental Plantings

Windbreaks protect livestock, buildings, yards, fruit trees, gardens, and cropland from wind and snow; help to keep snow on fields; and provide food and cover for wildlife. Field windbreaks are narrow plantings made at right angles to the prevailing

wind and at specific intervals across the field. The interval depends on the erodibility of the soil.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

Table 9 shows the height that locally grown trees and shrubs are expected to reach in 20 years on soils in the survey area. The estimates in the table are based on measurements and observation of established plantings that have been given adequate care. They can be used as a guide in planning windbreaks and screens. Additional information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from the local office of the Natural Resources Conservation Service or of the Cooperative Extension Service or from a commercial nursery.

Forestland Productivity and Management

The tables in this section can help forest owners or managers plan the use of soils for wood crops. They show the potential productivity of the soils for wood crops and rate the soils according to the limitations that affect various aspects of forest management.

Forestland Productivity

In table 10, the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the “National Forestry Manual,” which is available in local offices of the Natural Resources Conservation Service or on the Internet (http://soils.usda.gov).

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Suggested trees to plant are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forestland Management

In tables 11a through 11d, interpretive ratings are given for various aspects of forest management. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified forest management practice. *Well suited* indicates that the soil has features that are favorable for the specified practice and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified practice. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *Poorly suited* indicates that the soil has one or more properties that are unfavorable for the specified practice. Overcoming the unfavorable properties requires special design, extra maintenance, and costly alteration. *Unsuited* indicates that the expected performance of the soil is unacceptable for the specified

practice or that extreme measures are needed to overcome the undesirable soil properties.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified forest management practice (1.00) and the point at which the soil feature is not a limitation (0.00).

Rating class terms for seedling mortality are expressed as *low, moderate,* and *high*. Where these terms are used, the numerical ratings indicate gradations between the point at which the potential for fire damage or seedling mortality is highest (1.00) and the point at which the potential is lowest (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils for forest management practices. More detailed information about the criteria used in the ratings is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet (http://soils.usda.gov).

For *limitations affecting construction of haul roads and log landings*, the ratings are based on slope, flooding, permafrost, plasticity index, the hazard of soil slippage, content of sand, the Unified classification, rock fragments on or below the surface, depth to a restrictive layer that is indurated, depth to a water table, and ponding. The limitations are described as slight, moderate, or severe. A rating of *slight* indicates that no significant limitations affect construction activities, *moderate* indicates that one or more limitations can cause some difficulty in construction, and *severe* indicates that one or more limitations can make construction very difficult or very costly.

The ratings of *suitability for log landings* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The soils are described as well suited, moderately suited, or poorly suited to use as log landings.

Ratings in the column *soil rutting hazard* are based on depth to a water table, rock fragments on or below the surface, the Unified classification, depth to a restrictive layer, and slope. Ruts form as a result of the operation of forest equipment. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that the soil is subject to little or no rutting, *moderate* indicates that rutting is likely, and *severe* indicates that ruts form readily.

Ratings in the column *hazard of off-road or off-trail erosion* are based on slope and on soil erodibility factor K. The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance. The hazard is described as slight, moderate, severe, or very severe. A rating of *slight* indicates that erosion is unlikely under ordinary climatic conditions; *moderate* indicates that some erosion is likely and that erosion-control measures may be needed; *severe* indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and *very severe* indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Ratings in the column *hazard of erosion on roads and trails* are based on the soil erodibility factor K, slope, and content of rock fragments. The ratings apply to unsurfaced roads and trails. The hazard is described as slight, moderate, or severe. A rating of *slight* indicates that little or no erosion is likely; *moderate* indicates that some erosion is likely, that the roads or trails may require occasional maintenance, and that simple erosion-control measures are needed; and *severe* indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

Ratings in the column *suitability for roads (natural surface)* are based on slope, rock fragments on the surface, plasticity index, content of sand, the Unified classification, depth to a water table, ponding, flooding, and the hazard of soil slippage. The ratings indicate the suitability for using the natural surface of the soil for roads. The soils are described as well suited, moderately suited, or poorly suited to this use.

Ratings in the column *suitability for mechanical site preparation (surface)* are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 1 foot is considered in the ratings.

Ratings in the column *suitability for mechanical site preparation (deep)* are based on slope, depth to a restrictive layer, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or unsuited to this management activity. The part of the soil from the surface to a depth of about 3 feet is considered in the ratings.

Ratings in the column *potential for seedling mortality* are based on flooding, ponding, depth to a water table, content of lime, reaction, salinity, available water capacity, soil moisture regime, soil temperature regime, aspect, and slope. The soils are described as having a low, moderate, or high potential for seedling mortality.

Recreation

The soils of the survey area are rated in tables 12a and 12b according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in tables 12a and 12b can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary

facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 13, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, soybeans, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are bromegrass, timothy, orchardgrass, clover, alfalfa, wheatgrass, and birdsfoot trefoil.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of wild herbaceous plants are bluestem, indiangrass, blueberry, goldenrod, lambsquarters, dandelions, blackberry, ragweed, wheatgrass, and nightshade.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, poplar, box elder, birch, maple, green ash, willow, and American elm.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, cedar, and tamarack.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, wild millet, rushes, sedges, bulrushes, wild rice, arrowhead, waterplantain, cattails, prairie cordgrass, bluejoint grass, asters, and beggarticks.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, wildlife watering developments, beaver ponds, and other wildlife ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include Hungarian partridge, ring-necked pheasant, bobwhite quail, sharp-tailed grouse, meadowlark, field sparrow, cottontail rabbit, and red fox.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, ruffed grouse, thrushes, woodpeckers, owls, tree squirrels, porcupine, raccoon, and white-tailed deer.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, bitterns, rails, kingfishers, muskrat, otter, mink, and beaver.

Engineering

This section provides information for planning land uses related to urban development and to water management (fig. 11). Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading “Soil Properties.”

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.



Figure 11.—Streambank stabilization practices help to control erosion along streambeds.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 14a and 14b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and

grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 15a and 15b show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may

not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include

flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 16a and 16b give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

Gravel and *sand* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 16a, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of gravel or sand are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains gravel or sand, the soil is considered a likely source regardless of thickness. The assumption is that the gravel or sand layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of gravel and sand. A rating of *good* or *fair* means that the material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of gravel or sand. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

In table 16b, the soils are rated *good, fair,* or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the table. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources

of reclamation material, roadfill, or topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

Tables 17a, 17b, and 17c give information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; aquifer-fed excavated ponds; constructing grassed waterways and surface drains; constructing terraces and diversions; tile drains and underground outlets; and irrigation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations

generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Table 17a

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Table 17b

Grassed waterways and surface drains are natural or constructed channels, generally broad and shallow, that conduct surface water to outlets at a nonerosive velocity. Large stones, wetness, slope, and depth to bedrock affect the construction of grassed waterways and surface drains. A hazard of wind erosion, a low available water capacity, restricted rooting depth, toxic substances such as salts and sodium, and restricted permeability adversely affect the growth and maintenance of the grass after construction.

Terraces and diversions are embankments or a combination of channels and ridges constructed across a slope to control erosion and conserve moisture by intercepting runoff. Slope, wetness, large stones, and depth to bedrock affect the construction of terraces and diversions. A restricted rooting depth, a severe hazard of wind erosion or water erosion, an excessively coarse texture, and restricted permeability adversely affect maintenance.

Tile drains and underground outlets are used in some areas to remove excess subsurface and surface water from the soil. The ratings in the table apply to the soil in

its undisturbed condition and do not include consideration of current land use. Depth to bedrock, a dense layer, or a cemented pan, the content of large stones, and the content of clay influence the ease of digging, filling, and compacting. A seasonal high water table, ponding, and flooding may restrict the period when excavations can be made. The slope influences the use of machinery. Soil texture and depth to the water table influence the resistance to sloughing. Subsidence of organic layers influences grade and stability of tile drains.

Table 17c

Irrigation is the controlled application of water to supplement rainfall and support plant growth. The design and management of an irrigation system are affected by depth to the water table, the need for drainage, flooding, available water capacity, intake rate, permeability, erosion hazard, and slope. The construction of a system is affected by large stones and depth to bedrock or a cemented pan. The performance of a system is affected by the depth of the root zone, the amount of salts or sodium, and soil reaction.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Table 18 gives the engineering classifications and the range of index properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter (fig. 12). “Loam,” for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, “gravelly.” Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group

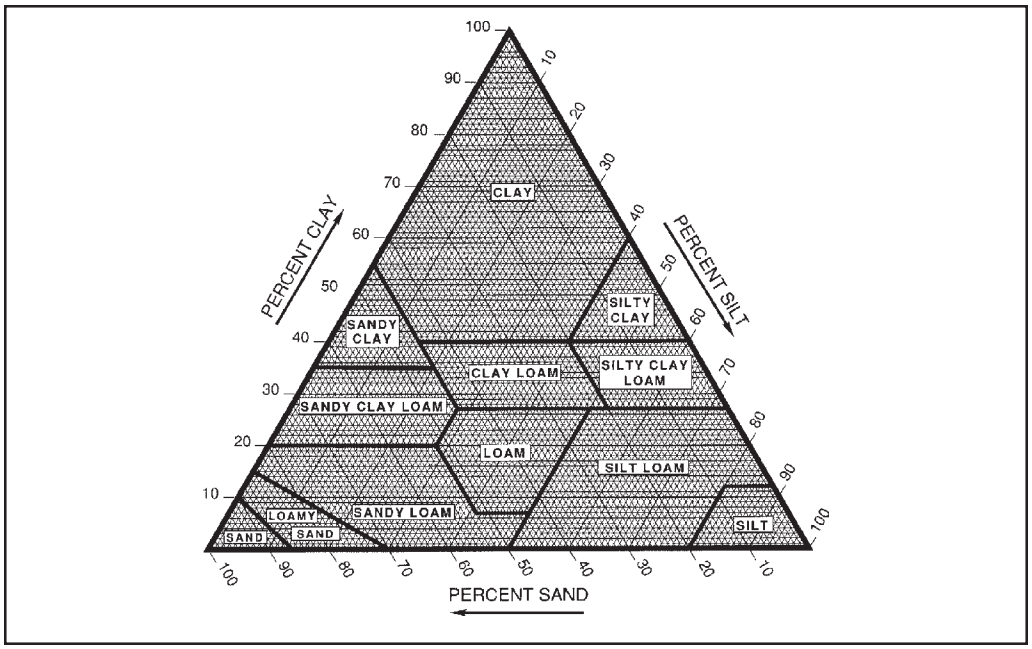


Figure 12.—Percentages of clay, silt, and sand in the basic USDA soil textural classes.

index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical Properties

Table 19 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as

classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In the table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In the table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In the table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^1/_3$- or $^1/_{10}$-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (K_{sat}) refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 19, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops (fig. 13).

Erosion factors are shown in table 19 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the “National Soil Survey Handbook” (USDA/NRCS, National Soil Survey Handbook).

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 20 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.



Figure 13.—Maintaining a cover crop, such as close-seeded alfalfa, in this strongly sloping area of Fayette soils helps to control erosion and improves soil structure and the content of organic matter.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Water Features

Table 21 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 21 indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* of flooding are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year). *Common* is used when the occasional and frequent classes are grouped for certain purposes.

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Water table refers to a saturated zone in the soil. Table 21 indicates the depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone for the specified *months* in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

The table also shows the *kind of water table*, that is, apparent or perched. An *apparent* water table is a thick zone of free water in the soil. It is indicated by the level at which water stands in an uncased borehole after adequate time is allowed for adjustment in the surrounding soil. A *perched* water table is water standing above an unsaturated zone. In places an upper, or perched, water table is separated from a lower one by a dry zone.

Soil Features

Table 22 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

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Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook" (available in local offices of the Natural Resources Conservation Service or on the Internet).

ABC soil. A soil having an A, a B, and a C horizon.

Ablation till. Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.

AC soil. A soil having only an A and a C horizon. Commonly, such soil formed in recent alluvium or on steep, rocky slopes.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvial fan. A low, outspread mass of loose materials and/or rock material, commonly with gentle slopes. It is shaped like an open fan or a segment of a cone. The material was deposited by a stream at the place where it issues from a narrow mountain valley or upland valley or where a tributary stream is near or at its junction with the main stream. The fan is steepest near its apex, which points upstream, and slopes gently and convexly outward (downstream) with a gradual decrease in gradient.

Alluvium. Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

Alpha,alpha-dipyridyl. A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction toward which a slope faces. Also called slope aspect.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Basal till. Compact till deposited beneath the ice.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.

Base slope (geomorphology). A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Bedding plane. A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

Bedding system. A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Blowout. A saucer-, cup-, or trough-shaped depression formed by wind erosion on a preexisting dune or other sand deposit, especially in an area of shifting sand or loose soil or where protective vegetation is disturbed or destroyed; the adjoining accumulation of sand derived from the depression, where recognizable, is commonly included. Blowouts are commonly small.

Bottom land. An informal term loosely applied to various portions of a flood plain.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks. A landscape or tract of steep, rough or broken land dissected by ravines and gullies and marking a sudden change in topography.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Calcium carbonate. A common mineral in sediments and soils.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Catsteps. See Terracettes.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A dense, compact, slowly permeable subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. A claypan is commonly hard when dry and plastic and sticky when wet.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

Colluvium. Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. See Redoximorphic features.

Conglomerate. A coarse grained, clastic sedimentary rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-

improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Coprogenous earth (sedimentary peat). A type of limnic layer composed predominantly of fecal material derived from aquatic animals.

Corrosion (geomorphology). A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

Corrosion (soil survey interpretations). Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Delta. A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depression. Any relatively sunken part of the earth's surface; especially a low-lying area surrounded by higher ground. A closed depression has no natural outlet for surface drainage. An open depression has a natural outlet for surface drainage.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Divided-slope farming. A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

Drift. A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains, eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.

Drumlin. A low, smooth, elongated oval hill, mound, or ridge of compact till that has a core of bedrock or drift. It commonly has a blunt nose facing the direction from which the ice approached and a gentler slope tapering in the other direction. The longer axis is parallel to the general direction of glacier flow. Drumlins are products of streamline (laminar) flow of glaciers, which molded the subglacial floor through a combination of erosion and deposition.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Dune. A low mound, ridge, bank, or hill of loose, windblown granular material (generally sand), either barren and capable of movement from place to place or covered and stabilized with vegetation but retaining its characteristic shape.

Earthy fill. See Mine spoil.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

End moraine. A ridgelike accumulation that is being or was produced at the outer margin of an actively flowing glacier at any given time.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian deposit. Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion surface. A land surface shaped by the action of erosion, especially by running water.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion. Synonym: scarp.

Esker. A long, narrow, sinuous, steep-sided ridge of stratified sand and gravel deposited as the bed of a stream flowing in an ice tunnel within or below the ice (subglacial) or between ice walls on top of the ice of a wasting glacier and left behind as high ground when the ice melted. Eskers range in length from less than a kilometer to more than 160 kilometers and in height from 3 to 30 meters.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fill slope. A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

First bottom. An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. The nearly level plain that borders a stream and is subject to flooding unless protected artificially.

Flood-plain landforms. A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

Flood-plain splay. A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

Flood-plain step. An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.

Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.

Footslope. The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Fragipan. A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Geosol. A buried soil that formed on a landscape in the past with distinctive morphological features resulting from a soil-forming environment that no longer exists at the site. The former pedogenic process was interrupted by burial. A geosol is a laterally traceable, mappable, geologic weathering profile that has a consistent stratigraphic position. See Paleosol.

Gilgai. Commonly, a succession of microbasins and microknolls in nearly level areas or of microvalleys and microridges parallel with the slope. Typically, the microrelief of clayey soils that shrink and swell considerably with changes in moisture content.

Glaciofluvial deposits. Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur in the form of outwash plains, valley trains, deltas, kames, eskers, and kame terraces.

Glaciolacustrine deposits. Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are bedded or laminated.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Graded stripcropping. Growing crops in strips that grade toward a protected waterway.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground moraine. An extensive, fairly even layer of till having an uneven or undulating surface.

Ground water. Water filling all the unblocked pores of the material below the water table.

Gully. A small channel with steep sides caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hard to reclaim (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Head slope (geomorphology). A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.

Hillslope. A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

L horizon.—A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Interfluve. A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general

direction. An elevated area between two drainageways that sheds water to those drainageways.

Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. See Redoximorphic features.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Kame. A low mound, knob, hummock, or short irregular ridge composed of stratified sand and gravel deposited by a subglacial stream as a fan or delta at the margin of a melting glacier; by a supraglacial stream in a low place or hole on the surface of the glacier; or as a ponded deposit on the surface or at the margin of stagnant ice.

Knoll. A small, low, rounded hill rising above adjacent landforms.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake plain. A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

Lake terrace. A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Landscape. A collection of related natural landforms; usually the land surface which the eye can comprehend in a single view.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess. Material transported and deposited by wind and consisting dominantly of silt-sized particles.
Low strength. The soil is not strong enough to support loads.
Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.
Masses. See Redoximorphic features.
Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.
Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.
Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.
Mine spoil. An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.
Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.
Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.
Miscellaneous area. A kind of map unit that has little or no natural soil and supports little or no vegetation.
Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.
Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.
Mollic epipedon. A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.
Moraine. In terms of glacial geology, a mound, ridge, or other topographically distinct accumulation of unsorted, unstratified drift, predominantly till, deposited primarily by the direct action of glacial ice in a variety of landforms. Also, a general term for a landform composed mainly of till (except for kame moraines, which are composed mainly of stratified outwash) that has been deposited by a glacier. Some types of moraines are disintegration, end, ground, kame, lateral, recessional, and terminal.
Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.
Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).
Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.
Natric horizon. A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.
Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. See Redoximorphic features.

Nose slope (geomorphology). A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slope-wash sediments (for example, slope alluvium).

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Outwash. Stratified and sorted sediments (chiefly sand and gravel) removed or "washed out" from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.

Outwash plain. An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Paleosol. A general term used to describe a soil that formed on a landscape of the past; it may be a buried soil, a relict soil, or an exhumed soil. See Geosol.

Paleoterrace. An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and commonly does not grade to, a present-day stream or drainage network.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedisediment. A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permafrost. Ground, soil, or rock that remains at or below 0 degrees C for at least 2 years. It is defined on the basis of temperature and is not necessarily frozen.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as

"permeability." Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Pitting (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plinthite. The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Pore linings. See Redoximorphic features.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is

neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Redoximorphic concentrations. See Redoximorphic features.

Redoximorphic depletions. See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
   A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; *and*
   B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
   C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
   A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; *and*
   B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.

Regolith. All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

Rill. A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

Riser. The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saturated hydraulic conductivity (K_{sat}). See Permeability.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Scarification. The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

Second bottom. The first terrace above the normal flood plain (or first bottom) of a river.

Sedimentary rock. A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Side slope (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Slickensides (pedogenic). Grooved, striated, and/or glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.

Slope alluvium. Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.

Sloughed till. Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on outwash, or on a glaciolacustrine deposit.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stone line. In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Strath terrace. A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grain* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce

a crop every year. Summer fallow is frequently practiced before planting winter grain.

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terminal moraine. An end moraine that marks the farthest advance of a glacier. It typically has the form of a massive arcuate or concentric ridge, or complex of ridges, and is underlain by till and other types of drift.

Terrace (conservation). An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

Terracettes. Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables). Otherwise suitable soil material that is too thin for the specified use.

Till. Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.

Till plain. An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Tread. The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

Tuff. A generic term for any consolidated or cemented deposit that is 50 percent or more volcanic ash.

Upland. An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Valley fill. In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Varve. A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering. All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Table 1.--Temperature and Precipitation

(Recorded in the period 1971-2000 at Carroll, Illinois)

Month	Temperature						Precipitation				
				2 years in 10 will have--				2 years in 10 will have--			
	Average daily maximum	Average daily minimum	Average	Maximum temperature higher than--	Minimum temperature lower than--	Average number of growing degree days*	Average	Less than--	More than--	Average number of days with 0.10 inch or more	Average snowfall
	°F	°F	°F	°F	°F	Units	In	In	In		In
January----	28.2	7.7	18.0	53	-24	0	1.43	0.73	2.12	4	10.7
February---	34.0	13.0	23.5	61	-22	0	1.52	.58	2.41	3	6.8
March------	46.0	24.6	35.3	77	-3	17	2.63	1.18	3.94	5	4.0
April------	59.6	34.4	47.0	85	12	79	3.55	2.18	4.79	6	1.5
May--------	71.7	45.9	58.8	90	26	288	4.34	2.29	6.34	7	.0
June-------	80.9	54.4	67.7	95	36	530	4.75	2.35	7.10	7	.0
July-------	84.5	58.7	71.6	97	43	667	3.74	2.19	5.32	6	.0
August-----	82.3	56.3	69.3	96	39	600	4.62	2.55	6.25	7	.0
September--	75.0	47.3	61.1	93	27	346	3.33	1.54	5.17	5	.0
October----	63.2	35.8	49.5	85	16	113	2.70	1.11	4.00	5	.1
November---	46.6	26.5	36.5	72	1	14	2.84	1.32	4.23	5	2.6
December---	33.1	14.0	23.6	58	-15	1	2.02	.97	3.05	4	7.7
Yearly:											
Average---	58.8	34.9	46.8	---	---	---	---	---	---	---	---
Extreme---	102	-30	---	98	-25	---	---	---	---	---	---
Total-----	---	---	---	---	---	2,656	37.48	30.08	43.09	64	33.4

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (50 degrees F).

Table 2.--Freeze Dates in Spring and Fall

(Recorded in the period 1971-2000 at Carroll, Illinois)

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	Apr. 26	May 14	May 25
2 years in 10 later than--	Apr. 21	May 8	May 20
5 years in 10 later than--	Apr. 12	Apr. 27	May 10
First freezing temperature in fall:			
1 year in 10 earlier than--	Sept. 28	Sept. 20	Sept. 11
2 years in 10 earlier than--	Oct. 4	Sept. 25	Sept. 15
5 years in 10 earlier than--	Oct. 15	Oct. 5	Sept. 25

Table 3.--Growing Season

(Recorded in the period 1971-2000 at Carroll, Illinois)

Probability	Daily minimum temperature during growing season		
	Higher than 24 °F	Higher than 28 °F	Higher than 32 °F
	Days	Days	Days
9 years in 10	161	140	115
8 years in 10	170	147	123
5 years in 10	186	162	138
2 years in 10	202	176	152
1 year in 10	210	184	160

Table 4.--Classification of the Soils

(An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series)

Soil name	Family or higher taxonomic class
Ade	Coarse-loamy, mixed, superactive, mesic Lamellic Argiudolls
Argyle	Fine-loamy, mixed, superactive, mesic Mollic Hapludalfs
Ashdale	Fine-silty, mixed, superactive, mesic Typic Argiudolls
*Ashdale	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
Atterberry	Fine-silty, mixed, superactive, mesic Udollic Endoaqualfs
*Beavercreek	Loamy-skeletal, mixed, active, calcareous, mesic Typic Udifluvents
Camden	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Casco	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Inceptic Hapludalfs
Coatsburg	Fine, smectitic, mesic Vertic Argiaquolls
*Coatsburg	Fine, smectitic, mesic Vertic Epiaqualfs
Coloma	Mixed, mesic Lamellic Udipsamments
Coyne	Coarse-loamy, mixed, active, mesic Typic Argiudolls
Derinda	Fine, mixed, mesic Oxyaquic Hapludalfs
Dickinson	Coarse-loamy, mixed, superactive, mesic Typic Hapludolls
Dorchester	Fine-silty, mixed, superactive, calcareous, mesic Typic Udifluvents
Drummer	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Dubuque	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Dunbarton	Clayey, smectitic, mesic Lithic Hapludalfs
*Durand (416C2)	Fine-loamy, mixed, superactive, mesic Mollic Hapludalfs
*Durand (416C3)	Fine-loamy, mixed, superactive, mesic Typic Hapludalfs
Edgington	Fine-silty, mixed, superactive, mesic Argiaquic Argialbolls
Eleroy	Fine-silty, mixed, superactive, mesic Oxyaquic Hapludalfs
Elizabeth	Loamy-skeletal, mixed, superactive, mesic Lithic Hapludolls
Fayette	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Flagg	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Fluvaquents	Fine-silty, mixed, active, nonacid, mesic Typic Fluvaquents
Fox	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludalfs
Gale	Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludalfs
Gilford	Coarse-loamy, mixed, superactive, mesic Typic Endoaquolls
Greenbush	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
*Hitt	Fine-loamy, mixed, superactive, mesic Mollic Hapludalfs
Hoopeston	Coarse-loamy, mixed, superactive, mesic Aquic Hapludolls
Huntsville	Fine-silty, mixed, superactive, mesic Cumulic Hapludolls
Joy	Fine-silty, mixed, superactive, mesic Aquic Hapludolls
Keltner	Fine-silty, mixed, superactive, mesic Oxyaquic Argiudolls
Lacrescent	Loamy-skeletal, mixed, superactive, mesic Typic Hapludolls
Lamoille	Fine, mixed, superactive, mesic Typic Hapludalfs
Lamont	Coarse-loamy, mixed, superactive, mesic Typic Hapludalfs
Lawson	Fine-silty, mixed, superactive, mesic Aquic Cumulic Hapludolls
Littleton	Fine-silty, mixed, superactive, mesic Aquic Cumulic Hapludolls
*Loran	Fine-silty, mixed, superactive, mesic Aquollic Hapludalfs
Medary	Fine, mixed, superactive, mesic Oxyaquic Hapludalfs
Millington	Fine-loamy, mixed, superactive, calcareous, mesic Cumulic Endoaquolls
Mt. Carroll	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
Muscatune	Fine-silty, mixed, superactive, mesic Aquic Argiudolls
Myrtle	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
NewGlarus	Fine-silty over clayey, mixed, superactive, mesic Typic Hapludalfs
Niota	Fine, mixed, superactive, mesic Vertic Albaqualfs
Ogle	Fine-silty, mixed, superactive, mesic Typic Argiudolls
*Ogle (412C2)	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
*Ogle (412C3)	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Orion	Coarse-silty, mixed, superactive, nonacid, mesic Aquic Udifluvents
Orthents	Fine-loamy, mixed, active, nonacid, mesic Typic Udorthents
Osco	Fine-silty, mixed, superactive, mesic Typic Argiudolls
*Osco	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs
Otter	Fine-silty, mixed, superactive, mesic Cumulic Endoaquolls
Palms	Loamy, mixed, euic, mesic Terric Haplosaprists
Palsgrove	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Pecatonica	Fine-loamy, mixed, superactive, mesic Typic Hapludalfs
Port Byron	Fine-silty, mixed, superactive, mesic Typic Hapludolls
*Port Byron	Fine-silty, mixed, superactive, mesic Mollic Hapludalfs

Table 4.--Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
Riley	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Fluvaquentic Hapludolls
Rodman	Sandy-skeletal, mixed, mesic Typic Hapludolls
Rozetta	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Sable	Fine-silty, mixed, superactive, mesic Typic Endoaquolls
Sawmill	Fine-silty, mixed, superactive, mesic Cumulic Endoaquolls
Seaton	Fine-silty, mixed, superactive, mesic Typic Hapludalfs
Selma	Fine-loamy, mixed, superactive, mesic Typic Endoaquolls
Sparta	Sandy, mixed, mesic Entic Hapludolls
Strawn	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Tell	Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludalfs
Timula	Coarse-silty, mixed, superactive, mesic Typic Eutrudepts
Wakeland	Coarse-silty, mixed, superactive, nonacid, mesic Aeric Fluvaquents
Waukegan	Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Typic Hapludolls
*Waukegan	Fine-silty over sandy or sandy-skeletal, mixed, superactive, mesic Dystric Eutrudepts
Woodbine	Fine-loamy, mixed, active, mesic Typic Hapludalfs
Worthen	Fine-silty, mixed, superactive, mesic Cumulic Hapludolls
Zwingle	Fine, smectitic, mesic Typic Albaqualfs

Table 5.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
21B	Pecatonica silt loam, 2 to 5 percent slopes	121	*
21C2	Pecatonica silt loam, 5 to 10 percent slopes, eroded	1,322	0.4
21C3	Pecatonica silty clay loam, 5 to 10 percent slopes, severely eroded	668	0.2
21D2	Pecatonica silt loam, 10 to 18 percent slopes, eroded	1,137	0.4
21D3	Pecatonica silty clay loam, 10 to 18 percent slopes, severely eroded	957	0.3
21F2	Pecatonica silt loam, 18 to 35 percent slopes, eroded	1,068	0.4
29D3	Dubuque silty clay loam, 10 to 18 percent slopes, severely eroded	596	0.2
37A	Worthen silt loam, 0 to 2 percent slopes	979	0.3
37B	Worthen silt loam, 2 to 5 percent slopes	1,521	0.5
37C	Worthen silt loam, 5 to 10 percent slopes	537	0.2
51A	Muscatune silt loam, 0 to 2 percent slopes	1,794	0.6
51B	Muscatune silt loam, 2 to 5 percent slopes	533	0.2
61A	Atterberry silt loam, 0 to 2 percent slopes	1,418	0.5
61B	Atterberry silt loam, 2 to 5 percent slopes	532	0.2
68A	Sable silty clay loam, 0 to 2 percent slopes	199	*
68A+	Sable silt loam, 0 to 2 percent slopes, overwash	205	*
81A	Littleton silt loam, 0 to 2 percent slopes	2,774	0.9
81B	Littleton silt loam, 2 to 5 percent slopes	788	0.3
86A	Osco silt loam, 0 to 2 percent slopes	2,306	0.8
86B	Osco silt loam, 2 to 5 percent slopes	43,234	14.5
86C	Osco silt loam, 5 to 10 percent slopes	13,428	4.5
86C2	Osco silt loam, 5 to 10 percent slopes, eroded	18,583	6.2
86C3	Osco silty clay loam, 5 to 10 percent slopes, severely eroded	2,484	0.8
87A	Dickinson sandy loam, 0 to 2 percent slopes	1,342	0.4
87B	Dickinson sandy loam, 2 to 5 percent slopes	294	*
87C2	Dickinson sandy loam, 5 to 10 percent slopes, eroded	173	*
88A	Sparta loamy sand, 0 to 2 percent slopes	2,772	0.9
88B	Sparta loamy sand, 1 to 6 percent slopes	4,160	1.4
88C	Sparta loamy sand, 6 to 12 percent slopes	267	*
88E	Sparta loamy sand, 12 to 20 percent slopes	145	*
98A	Ade loamy fine sand, 0 to 2 percent slopes	1,181	0.4
98B	Ade loamy fine sand, 2 to 7 percent slopes	685	0.2
98D	Ade loamy fine sand, 7 to 15 percent slopes	49	*
125A	Selma loam, 0 to 2 percent slopes	235	*
134A	Camden silt loam, 0 to 2 percent slopes	35	*
134B	Camden silt loam, 2 to 5 percent slopes	235	*
134C2	Camden silt loam, 5 to 10 percent slopes, eroded	208	*
152A	Drummer silty clay loam, 0 to 2 percent slopes	457	0.2
172A	Hoopeston sandy loam, 0 to 2 percent slopes	129	*
175B	Lamont fine sandy loam, 2 to 5 percent slopes	152	*
175C2	Lamont fine sandy loam, 5 to 10 percent slopes, eroded	419	0.1
175D2	Lamont fine sandy loam, 10 to 18 percent slopes, eroded	372	0.1
175D3	Lamont fine sandy loam, 10 to 18 percent slopes, severely eroded	142	*
175F2	Lamont fine sandy loam, 18 to 35 percent slopes, eroded	1,050	0.4
201A	Gilford fine sandy loam, 0 to 2 percent slopes	151	*
224C2	Strawn silt loam, 5 to 10 percent slopes, eroded	211	*
224D2	Strawn silt loam, 10 to 18 percent slopes, eroded	78	*
224D3	Strawn clay loam, 10 to 18 percent slopes, severely eroded	230	*
224F2	Strawn silt loam, 18 to 35 percent slopes, eroded	107	*
227B	Argyle silt loam, 2 to 5 percent slopes	90	*
227C2	Argyle silt loam, 5 to 10 percent slopes, eroded	1,205	0.4
261A	Niota silt loam, 0 to 2 percent slopes	720	0.2
268B	Mt. Carroll silt loam, 2 to 5 percent slopes	234	*
268C2	Mt. Carroll silt loam, 5 to 10 percent slopes, eroded	1,430	0.5
272A	Edgington silt loam, 0 to 2 percent slopes	942	0.3
274B	Seaton silt loam, 2 to 5 percent slopes	588	0.2
274C	Seaton silt loam, 5 to 10 percent slopes	1,509	0.5
274C2	Seaton silt loam, 5 to 10 percent slopes, eroded	2,009	0.7
274D2	Seaton silt loam, 10 to 18 percent slopes, eroded	3,028	1.0
274D3	Seaton silt loam, 10 to 18 percent slopes, severely eroded	2,157	0.7
274E2	Seaton silt loam, 18 to 25 percent slopes, eroded	166	*

See footnote at end of table.

Table 5.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
274F	Seaton silt loam, 18 to 35 percent slopes	4,010	1.3
275A	Joy silt loam, 0 to 2 percent slopes	126	*
275B	Joy silt loam, 2 to 5 percent slopes	189	*
277B	Port Byron silt loam, 2 to 5 percent slopes	2,726	0.9
277C	Port Byron silt loam, 5 to 10 percent slopes	1,737	0.6
277C2	Port Byron silt loam, 5 to 10 percent slopes, eroded	691	0.2
279A	Rozetta silt loam, 0 to 2 percent slopes	34	*
279B	Rozetta silt loam, 2 to 5 percent slopes	266	*
280B	Fayette silt loam, 2 to 5 percent slopes	3,095	1.0
280C	Fayette silt loam, 5 to 10 percent slopes	10,354	3.5
280C2	Fayette silt loam, 5 to 10 percent slopes, eroded	6,626	2.2
280C3	Fayette silty clay loam, 5 to 10 percent slopes, severely eroded	2,064	0.7
280D2	Fayette silt loam, 10 to 18 percent slopes, eroded	11,572	3.9
280D3	Fayette silty clay loam, 10 to 18 percent slopes, severely eroded	5,174	1.7
280F2	Fayette silt loam, 18 to 35 percent slopes, eroded	7,087	2.4
280G2	Fayette silt loam, 35 to 60 percent slopes, eroded	1,456	0.5
403E2	Elizabeth silt loam, 12 to 35 percent slopes, eroded	825	0.3
410C2	Woodbine silt loam, 5 to 10 percent slopes, eroded	234	*
410D2	Woodbine silt loam, 10 to 18 percent slopes, eroded	1,188	0.4
410D3	Woodbine silty clay loam, 10 to 18 percent slopes, severely eroded	980	0.3
410F2	Woodbine silt loam, 18 to 35 percent slopes, eroded	487	0.2
410G2	Woodbine silt loam, 35 to 60 percent slopes, eroded	50	*
411B	Ashdale silt loam, 2 to 5 percent slopes	37	*
411C2	Ashdale silt loam, 5 to 10 percent slopes, eroded	510	0.2
412B	Ogle silt loam, 2 to 5 percent slopes	726	0.2
412C2	Ogle silt loam, 5 to 10 percent slopes, eroded	3,385	1.1
412C3	Ogle silty clay loam, 5 to 10 percent slopes, severely eroded	45	*
414B	Myrtle silt loam, 2 to 5 percent slopes	64	*
414C2	Myrtle silt loam, 5 to 10 percent slopes, eroded	869	0.3
416C2	Durand silt loam, 5 to 10 percent slopes, eroded	1,637	0.5
416C3	Durand silty clay loam, 5 to 10 percent slopes, severely eroded	589	0.2
417D3	Derinda silty clay loam, 10 to 18 percent slopes, severely eroded	168	*
417E2	Derinda silt loam, 18 to 25 percent slopes, eroded	121	*
419B	Flagg silt loam, 2 to 5 percent slopes	121	*
419C2	Flagg silt loam, 5 to 10 percent slopes, eroded	1,174	0.4
419D2	Flagg silt loam, 10 to 18 percent slopes, eroded	308	0.1
419D3	Flagg silty clay loam, 10 to 18 percent slopes, severely eroded	497	0.2
429C2	Palsgrove silt loam, 5 to 10 percent slopes, eroded	2,534	0.8
505D2	Dunbarton silt loam, 6 to 12 percent slopes, eroded	364	0.1
505D3	Dunbarton silty clay loam, 6 to 12 percent slopes, severely eroded	343	0.1
505E2	Dunbarton silt loam, 12 to 20 percent slopes, eroded	392	0.1
505E3	Dunbarton silty clay loam, 12 to 20 percent slopes, severely eroded	589	0.2
505F2	Dunbarton silt loam, 20 to 35 percent slopes, eroded	263	*
505G	Dunbarton silt loam, 35 to 60 percent slopes	206	*
506C2	Hitt silt loam, 5 to 10 percent slopes, eroded	635	0.2
506C3	Hitt silty clay loam, 5 to 10 percent slopes, severely eroded	128	*
546C2	Keltner silt loam, 5 to 10 percent slopes, eroded	126	*
547C2	Eleroy silt loam, 5 to 10 percent slopes, eroded	223	*
547D2	Eleroy silt loam, 10 to 18 percent slopes, eroded	149	*
564B	Waukegan silt loam, 2 to 5 percent slopes	802	0.3
564C2	Waukegan silt loam, 5 to 10 percent slopes, eroded	2,609	0.9
565B	Tell silt loam, 2 to 5 percent slopes	243	*
565C2	Tell silt loam, 5 to 10 percent slopes, eroded	1,265	0.4
565D2	Tell silt loam, 10 to 18 percent slopes, eroded	1,196	0.4
565D3	Tell silt loam, 10 to 18 percent slopes, severely eroded	596	0.2
565F2	Tell silt loam, 18 to 35 percent slopes, eroded	583	0.2
569F2	Medary silty clay loam, 15 to 45 percent slopes, eroded	500	0.2
572C2	Loran silt loam, 5 to 10 percent slopes, eroded	130	*
576A	Zwingle silt loam, 0 to 2 percent slopes	532	0.2
576B	Zwingle silt loam, 2 to 5 percent slopes	401	0.1
576C	Zwingle silt loam, 5 to 10 percent slopes	136	*

See footnote at end of table.

Table 5.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
660D2	Coatsburg silt loam, 10 to 18 percent slopes, eroded	81	*
660D3	Coatsburg silty clay loam, 10 to 18 percent slopes, severely eroded	130	*
675A	Greenbush silt loam, 0 to 2 percent slopes	56	*
675B	Greenbush silt loam, 2 to 5 percent slopes	4,548	1.5
675C	Greenbush silt loam, 5 to 10 percent slopes	3,964	1.3
675C2	Greenbush silt loam, 5 to 10 percent slopes, eroded	4,031	1.4
689B	Coloma sand, 2 to 7 percent slopes	486	0.2
689D	Coloma sand, 7 to 15 percent slopes	113	*
689F	Coloma sand, 20 to 30 percent slopes	450	0.2
735D2	Casco-Rodman-Fox complex, 6 to 12 percent slopes, eroded	126	*
735E2	Casco-Rodman-Fox complex, 12 to 20 percent slopes, eroded	45	*
764B	Coyne fine sandy loam, 2 to 5 percent slopes	271	*
785G	Lacrescent cobbly loam, 25 to 60 percent slopes	48	*
798C2	Fayette-Gale silt loams, 5 to 10 percent slopes, eroded	52	*
802B	Orthents, loamy, undulating	392	0.1
835G	Earthen dam	11	*
862	Pits, sand	15	*
864	Pits, quarries	221	*
865	Pits, gravel	115	*
905F	NewGlarus-Lamoille silt loams, 18 to 35 percent slopes	5,708	1.9
905G	NewGlarus-Lamoille silt loams, 35 to 60 percent slopes	2,988	1.0
928C2	NewGlarus-Palsgrove silt loams, 5 to 10 percent slopes, eroded	609	0.2
928D2	NewGlarus-Palsgrove silt loams, 10 to 18 percent slopes, eroded	2,435	0.8
943F2	Seaton-Timula silt loams, 18 to 35 percent slopes, eroded	528	0.2
943G2	Seaton-Timula silt loams, 35 to 60 percent slopes, eroded	4,855	1.6
952C2	Tell-Lamont complex, 5 to 10 percent slopes, eroded	527	0.2
952D2	Tell-Lamont complex, 10 to 18 percent slopes, eroded	584	0.2
952D3	Tell-Lamont complex, 10 to 18 percent slopes, severely eroded	304	0.1
952F2	Tell-Lamont complex, 18 to 35 percent slopes, eroded	949	0.3
1076A	Otter silt loam, undrained, 0 to 2 percent slopes, frequently flooded	471	0.2
1082A	Millington silt loam, undrained, 0 to 2 percent slopes, frequently flooded	157	*
1107A	Sawmill silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded	536	0.2
1239A	Dorchester silt loam, undrained, 0 to 2 percent slopes, frequently flooded	297	*
1451A	Lawson silt loam, undrained, 0 to 2 percent slopes, frequently flooded	129	*
3076A	Otter silt loam, 0 to 2 percent slopes, frequently flooded	1,196	0.4
3082A	Millington silt loam, 0 to 2 percent slopes, frequently flooded	234	*
3107+	Sawmill silt loam, 0 to 2 percent slopes, frequently flooded, overwash	944	0.3
3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded	1,442	0.5
3333A	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded	444	0.1
3415A	Orion silt loam, 0 to 2 percent slopes, frequently flooded	2,706	0.9
3451A	Lawson silt loam, 0 to 2 percent slopes, frequently flooded	12,788	4.3
3579A	Beavercreek silt loam, 0 to 2 percent slopes, frequently flooded	545	0.2
3646L	Fluvaquents, loamy, 0 to 2 percent slopes, frequently flooded, long duration	2,945	1.0
7076A	Otter silt loam, 0 to 2 percent slopes, rarely flooded	179	*
7082A	Millington clay loam, 0 to 2 percent slopes, rarely flooded	118	*
7100A	Palms muck, 0 to 2 percent slopes, rarely flooded	307	0.1
7107+	Sawmill silt loam, 0 to 2 percent slopes, rarely flooded, overwash	186	*
7107A	Sawmill silty clay loam, 0 to 2 percent slopes, rarely flooded	1,195	0.4
7415A	Orion silt loam, 0 to 2 percent slopes, rarely flooded	391	0.1
7451A	Lawson silt loam, 0 to 2 percent slopes, rarely flooded	723	0.2
7452A	Riley loam, 0 to 2 percent slopes, rarely flooded	619	0.2
8077A	Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded	208	*
8239A	Dorchester silt loam, 0 to 2 percent slopes, occasionally flooded	7,617	2.6
8239B	Dorchester silt loam, 2 to 5 percent slopes, occasionally flooded	158	*
M-W	Miscellaneous water	24	*
W	Water	14,626	4.9
	Total	298,535	100.0

* Less than 0.1 percent.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
21B:							
Pecatonica	2e	138	44	53	68	4.00	5.9
21C2:							
Pecatonica	3e	129	41	50	64	3.79	5.5
21C3:							
Pecatonica	4e	120	38	46	59	3.50	5.0
21D2:							
Pecatonica	3e	121	38	47	60	3.54	5.1
21D3:							
Pecatonica	4e	110	35	43	55	3.22	4.6
21F2:							
Pecatonica	6e	---	---	---	---	3.90	2.6
29D3:							
Dubuque	6e	---	---	---	---	2.60	4.1
37A:							
Worthen	1	175	54	67	92	6.33	9.3
37B:							
Worthen	2e	173	53	66	91	6.29	9.2
37C:							
Worthen	3e	170	51	64	89	6.14	8.4
51A:							
Muscatune	1	180	57	68	94	5.42	8.0
51B:							
Muscatune	2e	178	56	67	93	5.37	7.9
61A:							
Atterberry	1	164	51	64	88	4.97	7.3
61B:							
Atterberry	2e	162	50	63	87	4.92	7.3
68A:							
Sable	2w	173	57	67	89	5.20	7.7
68A+:							
Sable	2w	173	57	67	89	5.20	7.7
81A:							
Littleton	1	175	55	67	90	5.42	8.0
81B:							
Littleton	2e	173	54	66	89	5.37	7.9

See footnote at end of table.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
86A:							
Osco	1	172	54	68	92	6.22	9.2
86B:							
Osco	2e	170	53	67	91	6.16	9.1
86C:							
Osco	3e	165	52	65	88	5.97	8.7
86C2:							
Osco	3e	160	50	63	86	5.78	8.3
86C3:							
Osco	4e	148	46	58	79	5.35	7.7
87A:							
Dickinson	2s	128	42	51	67	3.05	4.5
87B:							
Dickinson	2e	127	42	51	66	3.02	4.5
87C2:							
Dickinson	3e	119	39	47	62	2.84	4.1
88A:							
Sparta	4s	107	37	45	52	3.62	5.3
88B:							
Sparta	4s	106	37	45	51	3.58	5.2
88C:							
Sparta	6s	---	---	---	---	3.48	5.1
88E:							
Sparta	7s	---	---	---	---	3.20	4.7
98A:							
Ade	3s	128	43	54	63	3.84	5.8
98B:							
Ade	3s	121	42	51	62	3.80	5.6
98D:							
Ade	3s	90	30	40	56	3.70	6.1
125A:							
Selma	2w	157	51	62	80	4.75	7.0
134A:							
Camden	1	149	46	58	78	4.29	6.3
134B:							
Camden	2e	148	46	57	77	4.25	6.3
134C2:							
Camden	3e	139	43	54	73	3.99	5.8
152A:							
Drummer	2w	175	57	66	90	5.09	7.5

See footnote at end of table.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
172A:							
Hoopeston	2s	132	43	53	66	4.29	6.3
175B:							
Lamont	3e	117	39	49	60	2.91	4.3
175C2:							
Lamont	3e	110	36	46	57	2.73	4.0
175D2:							
Lamont	4e	102	34	42	53	2.54	3.6
175D3:							
Lamont	6e	---	---	---	---	2.32	3.3
175F2:							
Lamont	7e	---	---	---	---	---	---
201A:							
Gilford	2w	133	44	53	66	4.10	6.0
224C2:							
Strawn	3e	118	39	47	51	2.94	4.3
224D2:							
Strawn	4e	110	37	44	48	2.75	4.0
224D3:							
Strawn	4e	100	33	40	43	2.50	3.6
224F2:							
Strawn	6e	---	---	---	---	2.09	3.0
227B:							
Argyle	2e	147	48	58	75	4.47	6.6
227C2:							
Argyle	3e	138	45	55	71	4.20	6.1
261A:							
Niota	2w	118	39	50	59	3.73	5.5
268B:							
Mt. Carroll	2e	163	51	62	83	5.48	8.0
268C2:							
Mt. Carroll	3e	153	48	59	78	5.15	7.4
272A:							
Edgington	2w	150	49	59	76	4.75	7.0
274B:							
Seaton	2e	149	46	57	76	4.03	5.9
274C:							
Seaton	3e	146	45	56	75	3.98	5.4
274C2:							
Seaton	3e	140	43	54	72	3.79	5.5

See footnote at end of table.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
274D2:							
Seaton	3e	130	40	50	67	3.52	5.0
274D3:							
Seaton	4e	119	36	46	61	3.22	4.6
274E2:							
Seaton	6e	---	---	---	---	3.09	5.0
274F:							
Seaton	7e	---	---	---	---	2.89	4.3
275A:							
Joy	1	175	55	68	93	5.42	8.0
275B:							
Joy	2e	173	54	67	92	5.37	7.9
277B:							
Port Byron	2e	175	54	67	93	6.27	9.2
277C:							
Port Byron	3e	170	53	65	90	6.08	8.9
277C2:							
Port Byron	3e	165	51	63	87	5.89	8.5
279A:							
Rozetta	1	148	46	59	76	4.75	7.0
279B:							
Rozetta	2e	147	46	58	75	4.70	6.9
280B:							
Fayette	2e	149	47	59	76	4.70	6.9
280C:							
Fayette	3e	146	46	58	75	4.61	6.7
280C2:							
Fayette	3e	140	44	56	72	4.42	6.4
280C3:							
Fayette	4e	129	40	52	66	4.09	5.8
280D2:							
Fayette	3e	131	41	52	67	4.13	6.0
280D3:							
Fayette	4e	118	37	47	61	3.80	5.3
280F2:							
Fayette	6e	---	---	---	---	3.37	5.0
280G2:							
Fayette	7e	---	---	---	---	---	---
403E2:							
Elizabeth	7s	---	---	---	---	---	---

See footnote at end of table.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
410C2:							
Woodbine	3e	111	36	---	57	2.94	4.3
410D2:							
Woodbine	3e	103	34	44	53	2.73	4.0
410D3:							
Woodbine	4e	94	31	40	48	2.50	3.6
410F2:							
Woodbine	6e	---	---	---	---	2.09	3.0
410G2:							
Woodbine	7e	---	---	---	---	---	---
411B:							
Ashdale	2e	151	48	60	83	4.70	6.9
411C2:							
Ashdale	3e	142	45	57	78	4.42	6.4
412B:							
Ogle	2e	157	50	62	85	5.26	7.7
412C2:							
Ogle	3e	148	47	59	80	4.94	7.2
412C3:							
Ogle	4e	137	44	54	74	4.57	6.6
414B:							
Myrtle	2e	151	49	58	77	4.28	6.3
414C2:							
Myrtle	3e	140	46	55	73	3.99	5.8
416C2:							
Durand	3e	141	47	57	73	5.52	6.6
416C3:							
Durand	4e	131	44	52	68	4.18	6.0
417D3:							
Derinda	6e	---	---	---	---	3.84	5.5
417E2:							
Derinda	6e	---	---	---	---	3.69	5.3
419B:							
Flagg	2e	145	47	56	74	4.47	6.6
419C2:							
Flagg	3e	136	44	53	70	4.20	6.1
419D2:							
Flagg	3e	127	41	50	65	3.93	5.7
419D3:							
Flagg	4e	115	37	45	59	3.57	5.1

See footnote at end of table.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
429C2:							
Palsgrove	3e	118	38	49	61	3.47	5.1
505D2:							
Dunbarton	4e	76	26	31	39	2.40	4.2
505D3:							
Dunbarton	6e	---	---	---	---	2.20	3.4
505E2:							
Dunbarton	6e	---	---	---	---	2.20	3.6
505E3:							
Dunbarton	7e	---	---	---	---	2.00	3.2
505F2:							
Dunbarton	7e	---	---	---	---	1.90	3.1
505G:							
Dunbarton	7e	---	---	---	---	---	---
506C2:							
Hitt	3e	132	44	53	70	3.89	5.7
506C3:							
Hitt	4e	122	40	49	65	3.59	5.2
546C2:							
Keltner	3e	134	44	51	70	3.57	5.2
547C2:							
Eleroy	3e	120	39	44	59	2.84	4.1
547D2:							
Eleroy	3e	112	37	41	55	2.65	3.8
564B:							
Waukegan	2e	145	47	56	72	3.92	5.7
564C2:							
Waukegan	3e	136	44	53	68	3.68	5.4
565B:							
Tell	2e	136	45	53	68	3.47	5.1
565C2:							
Tell	3e	127	42	50	64	3.26	4.8
565D2:							
Tell	4e	119	39	47	60	3.03	4.3
565D3:							
Tell	6e	---	---	---	---	2.77	4.0
565F2:							
Tell	6e	---	---	---	---	2.31	3.4
569F2:							
Medary	7e	---	---	---	---	---	---

See footnote at end of table.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
572C2:							
Loran	3e	137	45	54	71	4.10	5.9
576A:							
Zwingle	3w	127	43	52	62	3.84	5.7
576B:							
Zwingle	3e	126	43	51	61	3.80	5.6
576C:							
Zwingle	3e	123	42	50	60	3.72	5.4
660D2:							
Coatsburg	4e	100	34	40	47	3.00	4.4
660D3:							
Coatsburg	6e	---	---	---	---	2.50	3.7
675A:							
Greenbush	1	166	52	63	87	4.86	7.2
675B:							
Greenbush	2e	164	51	62	86	4.81	7.1
675C:							
Greenbush	3e	159	50	60	84	4.67	6.8
675C2:							
Greenbush	3e	154	48	59	81	4.52	6.7
689B:							
Coloma	4s	100	34	42	46	3.25	4.8
689D:							
Coloma	6s	---	---	---	---	2.98	4.3
689F:							
Coloma	7s	---	---	---	---	---	---
735D2		102	33	40	46	2.47	3.7
Casco	3e						
Rodman	4s						
Fox	4e						
735E2		---	---	---	---	2.25	3.2
Casco	4e						
Rodman	6s						
Fox	6e						
764B:							
Coyne	2e	127	42	52	62	3.25	4.8
785G:							
Lacrescent	7e	---	---	---	---	---	---

See footnote at end of table.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
798C2		121	39	48	62	3.74	5.8
Fayette	3e						
Gale	3e						
802B:							
Orthents	2e	---	---	---	---	---	---
835G.							
Earthen dam							
862, 864, 865.							
Pits							
905F		---	---	---	---	2.37	3.2
NewGlarus	6e						
Lamoille	6e						
905G		---	---	---	---	---	---
NewGlarus	7e						
Lamoille	7e						
928C2		120	38	48	60	3.28	5.2
NewGlarus	3e						
Palsgrove	3e						
928D2		112	36	45	56	3.07	4.8
NewGlarus	3e						
Palsgrove	3e						
943F2		---	---	---	---	2.71	3.8
Seaton	6e						
Timula	6e						
943G2		---	---	---	---	---	---
Seaton	7e						
Timula	7e						
952C2		121	40	48	61	3.10	4.4
Tell	3e						
Lamont	3e						
952D2		113	37	45	57	2.90	4.1
Tell	3e						
Lamont	4e						
952D3		103	34	41	52	2.60	3.7
Tell	4e						
Lamont	6e						
952F2		---	---	---	---	---	3.1
Tell	6e						
Lamont	7e						
1076A:							
Otter	5w	---	---	---	---	---	---
1082A:							
Millington	5w	---	---	---	---	---	---

See footnote at end of table.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
1107A: Sawmill	5w	---	---	---	---	---	---
1239A: Dorchester	5w	---	---	---	---	---	---
1451A: Lawson	5w	---	---	---	---	---	---
3076A: Otter	2w	151	50	---	---	4.95	6.8
3082A: Millington	3w	139	44	---	---	4.17	6.1
3107+: Sawmill	3w	163	49	---	---	4.70	6.9
3107A: Sawmill	3w	153	50	---	---	4.70	6.9
3333A: Wakeland	2w	141	46	---	---	4.17	6.1
3415A: Orion	3w	146	46	---	---	4.07	6.0
3451A: Lawson	3w	154	50	---	---	4.68	6.9
3579A: Beavercreek	6s	91	32	---	---	2.70	4.1
3646L: Fluvaquents	5w	---	---	---	---	---	---
7076A: Otter	2w	168	55	64	84	5.09	7.5
7082A: Millington	2w	154	49	59	71	4.63	6.8
7100A: Palms	3w	145	46	---	---	---	5.7
7107+: Sawmill	2w	170	54	64	87	5.20	7.7
7107A: Sawmill	2w	170	54	64	87	5.20	7.7
7415A: Orion	2w	162	51	60	80	4.52	6.7
7451A: Lawson	2w	171	55	66	87	5.20	7.7
7452A: Riley	1	155	50	60	78	4.52	6.7

See footnote at end of table.

Table 6.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Corn	Soybeans	Winter wheat	Oats	Grass-legume hay	Grass-legume pasture
		Bu	Bu	Bu	Bu	Tons	AUM*
8077A:							
Huntsville	1	174	55	67	90	6.78	10.0
8239A:							
Dorchester	2w	161	47	58	79	5.09	7.5
8239B:							
Dorchester	2e	159	47	57	78	5.04	7.4

* Animal unit month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

Table 7.--Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Soil name
21B	Pecatonica silt loam, 2 to 5 percent slopes
37A	Worthen silt loam, 0 to 2 percent slopes
37B	Worthen silt loam, 2 to 5 percent slopes
37C	Worthen silt loam, 5 to 10 percent slopes
51A	Muscatune silt loam, 0 to 2 percent slopes
51B	Muscatune silt loam, 2 to 5 percent slopes
61A	Atterberry silt loam, 0 to 2 percent slopes (where drained)
61B	Atterberry silt loam, 2 to 5 percent slopes (where drained)
68A	Sable silty clay loam, 0 to 2 percent slopes (where drained)
68A+	Sable silt loam, 0 to 2 percent slopes, overwash (where drained)
81A	Littleton silt loam, 0 to 2 percent slopes
81B	Littleton silt loam, 2 to 5 percent slopes
86A	Osco silt loam, 0 to 2 percent slopes
86B	Osco silt loam, 2 to 5 percent slopes
87A	Dickinson sandy loam, 0 to 2 percent slopes
87B	Dickinson sandy loam, 2 to 5 percent slopes
87C2	Dickinson sandy loam, 5 to 10 percent slopes, eroded
125A	Selma loam, 0 to 2 percent slopes (where drained)
134A	Camden silt loam, 0 to 2 percent slopes
134B	Camden silt loam, 2 to 5 percent slopes
152A	Drummer silty clay loam, 0 to 2 percent slopes (where drained)
172A	Hoopeston sandy loam, 0 to 2 percent slopes
175B	Lamont fine sandy loam, 2 to 5 percent slopes
201A	Gilford fine sandy loam, 0 to 2 percent slopes (where drained)
227B	Argyle silt loam, 2 to 5 percent slopes
261A	Niota silt loam, 0 to 2 percent slopes (where drained)
268B	Mt. Carroll silt loam, 2 to 5 percent slopes
272A	Edgington silt loam, 0 to 2 percent slopes (where drained)
274B	Seaton silt loam, 2 to 5 percent slopes
275A	Joy silt loam, 0 to 2 percent slopes
275B	Joy silt loam, 2 to 5 percent slopes
277B	Port Byron silt loam, 2 to 5 percent slopes
279A	Rozetta silt loam, 0 to 2 percent slopes
279B	Rozetta silt loam, 2 to 5 percent slopes
280B	Fayette silt loam, 2 to 5 percent slopes
411B	Ashdale silt loam, 2 to 5 percent slopes
412B	Ogle silt loam, 2 to 5 percent slopes
414B	Myrtle silt loam, 2 to 5 percent slopes
419B	Flagg silt loam, 2 to 5 percent slopes
564B	Waukegan silt loam, 2 to 5 percent slopes
565B	Tell silt loam, 2 to 5 percent slopes
675A	Greenbush silt loam, 0 to 2 percent slopes
675B	Greenbush silt loam, 2 to 5 percent slopes
764B	Coyne fine sandy loam, 2 to 5 percent slopes
3076A	Otter silt loam, 0 to 2 percent slopes, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
3082A	Millington silt loam, 0 to 2 percent slopes, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
3107+	Sawmill silt loam, 0 to 2 percent slopes, frequently flooded, overwash (where drained and either protected from flooding or not frequently flooded during the growing season)
3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
3333A	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded (where drained and either protected from flooding or not frequently flooded during the growing season)
3415A	Orion silt loam, 0 to 2 percent slopes, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
3451A	Lawson silt loam, 0 to 2 percent slopes, frequently flooded (where protected from flooding or not frequently flooded during the growing season)

Table 7.--Prime Farmland--Continued

Map symbol	Soil name
3579A	Beavercreek silt loam, 0 to 2 percent slopes, frequently flooded (where protected from flooding or not frequently flooded during the growing season)
7076A	Otter silt loam, 0 to 2 percent slopes, rarely flooded (where drained)
7082A	Millington clay loam, 0 to 2 percent slopes, rarely flooded (where drained)
7107+	Sawmill silt loam, 0 to 2 percent slopes, rarely flooded, overwash (where drained)
7107A	Sawmill silty clay loam, 0 to 2 percent slopes, rarely flooded (where drained)
7415A	Orion silt loam, 0 to 2 percent slopes, rarely flooded
7451A	Lawson silt loam, 0 to 2 percent slopes, rarely flooded
7452A	Riley loam, 0 to 2 percent slopes, rarely flooded
8077A	Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded
8239A	Dorchester silt loam, 0 to 2 percent slopes, occasionally flooded
8239B	Dorchester silt loam, 2 to 5 percent slopes, occasionally flooded

Table 8.--Hydric Soils

(Only the map units that have hydric components are listed. See text for a description of hydric qualities and definitions of the hydric criteria codes)

Map symbol and map unit name	Component	Landform	Hydric status	Hydric criteria
51A:				
Muscatune silt loam, 0 to 2 percent slopes	Muscatune	Ground moraines	Not hydric	---
	Denny	Depressions	Hydric	2B3
	Edgington	Ground moraines	Hydric	2B3,3
	Sable	Depressions	Hydric	2B3
51B:				
Muscatune silt loam, 2 to 5 percent slopes	Muscatune	Ground moraines	Not hydric	---
	Sable	Ground moraines	Hydric	2B3
61A:				
Atterberry silt loam, 0 to 2 percent slopes	Atterberry	Ground moraines	Not hydric	---
	Denny	Depressions	Hydric	2B3
	Sable	Depressions	Hydric	2B3
61B:				
Atterberry silt loam, 2 to 5 percent slopes	Atterberry	Ground moraines	Not hydric	---
	Sable	Depressions	Hydric	2B3
68A:				
Sable silty clay loam, 0 to 2 percent slopes	Sable	Ground moraines	Hydric	2B3
68A+:				
Sable silt loam, 0 to 2 percent slopes, overwash	Sable	Ground moraines	Hydric	2B3,3
81A:				
Littleton silt loam, 0 to 2 percent slopes	Littleton	Stream terraces	Not hydric	---
	Vesser	Flood plains	Hydric	2B3
86A:				
Osco silt loam, 0 to 2 percent slopes	Osco	Ground moraines	Not hydric	---
	Sable	Depressions	Hydric	2B3
	Virden	Ground moraines	Hydric	2B3
86B:				
Osco silt loam, 2 to 5 percent slopes	Osco	Ground moraines	Not hydric	---
	Sable	Depressions	Hydric	2B3
	Virden	Ground moraines	Hydric	2B3
	Denny	Depressions	Hydric	2B3
86C2:				
Osco silt loam, 5 to 10 percent slopes, eroded	Osco	Ground moraines	Not hydric	---
	Denny	Depressions	Hydric	2B3
	Sable	Drainageways	Hydric	2B3
	Virden	Ground moraines	Hydric	2B3
87A:				
Dickinson sandy loam, 0 to 2 percent slopes	Dickinson	Stream terraces	Not hydric	---
	Gilford	Depressions	Hydric	2B3
87B:				
Dickinson sandy loam, 2 to 5 percent slopes	Dickinson	Stream terraces	Not hydric	---
	Gilford	Outwash plains	Hydric	2B3
88A:				
Sparta loamy sand, 0 to 2 percent slopes	Sparta	Stream terraces	Not hydric	---
	Orio	Depressions	Hydric	2B3

Table 8.--Hydric Soils--Continued

Map symbol and map unit name	Component	Landform	Hydric status	Hydric criteria
88B:				
Sparta loamy sand, 1 to 6 percent slopes	Sparta	Stream terraces	Not hydric	---
	Orio	Depressions	Hydric	2B3
88C:				
Sparta loamy sand, 6 to 12 percent slopes	Sparta	Stream terraces	Not hydric	---
	Gilford	Outwash plains	Hydric	2B3
	Orio	Depressions	Hydric	2B3
125A:				
Selma loam, 0 to 2 percent slopes	Selma	Outwash plains	Hydric	2B3
152A:				
Drummer silty clay loam, 0 to 2 percent slopes	Drummer	Outwash plains	Hydric	2B3
172A:				
Hoopeston sandy loam, 0 to 2 percent slopes	Hoopeston	Outwash plains	Not hydric	---
	Gilford	Depressions	Hydric	2B3
201A:				
Gilford fine sandy loam, 0 to 2 percent slopes	Gilford	Outwash plains	Hydric	2B3
261A:				
Niota silt loam, 0 to 2 percent slopes	Niota	Depressions	Hydric	2B3
272A:				
Edgington silt loam, 0 to 2 percent slopes	Edgington	Ground moraines	Hydric	2B3
275A:				
Joy silt loam, 0 to 2 percent slopes	Joy	Ground moraines	Not hydric	---
	Sable	Depressions	Hydric	2B3
275B:				
Joy silt loam, 2 to 5 percent slopes	Joy	Ground moraines	Not hydric	---
	Sable	Ground moraines	Hydric	2B3
277C2:				
Port Byron silt loam, 5 to 10 percent slopes, eroded	Port Byron	Ground moraines	Not hydric	---
	Sawmill	Drainageways	Hydric	2B3
279A:				
Rozetta silt loam, 0 to 2 percent slopes	Rozetta	Ground moraines	Not hydric	---
	Denny	Depressions	Hydric	2B3
279B:				
Rozetta silt loam, 2 to 5 percent slopes	Rozetta	Ground moraines	Not hydric	---
	Sable	Depressions	Hydric	2B3
546C2:				
Keltner silt loam, 5 to 10 percent slopes, eroded	Keltner	Valley sides	Not hydric	---
	Sawmill	Flood plains	Hydric	2B3
565B:				
Tell silt loam, 2 to 5 percent slopes	Tell	Outwash plains	Not hydric	---
	Orio	Outwash plains	Hydric	2B3

Table 8.--Hydric Soils--Continued

Map symbol and map unit name	Component	Landform	Hydric status	Hydric criteria
565C2:				
Tell silt loam, 5 to 10 percent slopes, eroded	Tell	Outwash plains	Not hydric	---
	Thorp	Depressions	Hydric	2B3
576A:				
Zwingle silt loam, 0 to 2 percent slopes	Zwingle	Terraces	Hydric	2B3
576B:				
Zwingle silt loam, 2 to 5 percent slopes	Zwingle	Terraces	Hydric	2B3
576C:				
Zwingle silt loam, 5 to 10 percent slopes	Zwingle	Terraces	Hydric	2B3
660D2:				
Coatsburg silt loam, 10 to 18 percent slopes, eroded	Coatsburg	Ground moraines	Hydric	2B3
660D3:				
Coatsburg silty clay loam, 10 to 18 percent slopes, severely eroded	Coatsburg	Ground moraines	Hydric	2B3
675A:				
Greenbush silt loam, 0 to 2 percent slopes	Greenbush	Ground moraines	Not hydric	---
	Denny	Depressions	Hydric	2B3
675B:				
Greenbush silt loam, 2 to 5 percent slopes	Greenbush	Ground moraines	Not hydric	---
	Denny	Depressions	Hydric	2B3
	Sable	Ground moraines	Hydric	2B3
802B:				
Orthents, loamy, undulating	Orthents	Ground moraines	Not hydric	---
	Sable	Ground moraines	Hydric	2B3
1076A:				
Otter silt loam, undrained, 0 to 2 percent slopes, frequently flooded	Otter	Flood plains	Hydric	2B3,3
1082A:				
Millington silt loam, undrained, 0 to 2 percent slopes, frequently flooded	Millington	Flood plains	Hydric	2B3,3
1107A:				
Sawmill silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded	Sawmill	Flood plains	Hydric	2B3,3
1451A:				
Lawson silt loam, undrained, 0 to 2 percent slopes, frequently flooded	Lawson	Flood plains	Not hydric	---
	Otter	Flood plains	Hydric	2B3,3
3076A:				
Otter silt loam, 0 to 2 percent slopes, frequently flooded	Otter	Flood plains	Hydric	2B3

Table 8.--Hydric Soils--Continued

Map symbol and map unit name	Component	Landform	Hydric status	Hydric criteria
3082A:				
Millington silt loam, 0 to 2 percent slopes, frequently flooded	Millington	Flood plains	Hydric	2B3
3107+:				
Sawmill silt loam, 0 to 2 percent slopes, frequently flooded, overwash	Sawmill	Flood plains	Hydric	2B3
3107A:				
Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded	Sawmill	Flood plains	Hydric	2B3
3333A:				
Wakeland silt loam, 0 to 2 percent slopes, frequently flooded	Wakeland	Flood plains	Not hydric	---
	Birds	Depressions	Hydric	2B3,4
	Sawmill	Swales	Hydric	2B3
3415A:				
Orion silt loam, 0 to 2 percent slopes, frequently flooded	Orion	Flood plains	Not hydric	---
	Beaucoup	Depressions	Hydric	2B3
	Sawmill	Flood plains	Hydric	2B3
	Zook	Flood plains	Hydric	2B3
3451A:				
Lawson silt loam, 0 to 2 percent slopes, frequently flooded	Lawson	Flood plains	Not hydric	---
	Otter	Swales	Hydric	2B3
	Zook	Swales	Hydric	2B3
	Birds	Flood plains	Hydric	2B3,3
	Sawmill	Swales	Hydric	2B3
3646L:				
Fluvaquents, loamy, 0 to 2 percent slopes, frequently flooded, long duration	Fluvaquents	Flood plains	Hydric	2B3,4
7076A:				
Otter silt loam, 0 to 2 percent slopes, rarely flooded	Otter	Flood plains	Hydric	2B3
7082A:				
Millington clay loam, 0 to 2 percent slopes, rarely flooded	Millington	Flood plains	Hydric	2B3
7100A:				
Palms muck, 0 to 2 percent slopes, rarely flooded	Palms	Backswamps	Hydric	1
7107+:				
Sawmill silt loam, 0 to 2 percent slopes, rarely flooded, overwash	Sawmill	Flood plains	Hydric	2B3
7107A:				
Sawmill silty clay loam, 0 to 2 percent slopes, rarely flooded	Sawmill	Flood plains	Hydric	---

Table 8.--Hydric Soils--Continued

Map symbol and map unit name	Component	Landform	Hydric status	Hydric criteria
7451A:				
Lawson silt loam, 0 to 2 percent slopes, rarely flooded	Lawson	Flood plains	Not hydric	---
	Beaucoup	Flood plains	Hydric	2B3
	Millington	Flood plains	Hydric	2B3
	Sawmill	Flood plains	Hydric	---
7452A:				
Riley loam, 0 to 2 percent slopes, rarely flooded	Riley	Flood plains	Not hydric	---
	Ambraw	Flood plains	Hydric	---
8077A:				
Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded	Huntsville	Flood plains	Not hydric	---
	Beaucoup	Flood plains	Hydric	2B3
8239A:				
Dorchester silt loam, 0 to 2 percent slopes, occasionally flooded	Dorchester	Flood plains	Not hydric	---
	Sawmill	Flood plains	Hydric	2B3

Table 9.--Windbreaks and Environmental Plantings

(Absence of an entry indicates that trees generally do not grow to the given height)

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
21B:					
Pecatonica	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
21C2:					
Pecatonica	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
21C3:					
Pecatonica	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
21D2:					
Pecatonica	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
21D3:					
Pecatonica	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
21F2:					
Pecatonica	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
29D3:					
Dubuque	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar-----	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
37A:					
Worthen	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
37B:					
Worthen	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
37C:					
Worthen	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
51A:					
Muscatune	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
51B:					
Muscatune	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
61A:					
Atterberry	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
61B:					
Atterberry	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
68A:					
Sable	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
68A+:					
Sable	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
81A:					
Littleton	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
81B:					
Littleton	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
86A:					
Osco	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
86B:					
Osco	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
86C:					
Osco	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
86C2:					
Osco	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
86C3:					
Osco	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
87A:					
Dickinson	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar-----	---
87B:					
Dickinson	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar-----	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
87C2:					
Dickinson	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
88A:					
Sparta	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine
88B:					
Sparta	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
88C:					
Sparta	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine
88E:					
Sparta	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine
98A:					
Ade	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
98B:					
Ade	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine
98D:					
Ade	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine
125A:					
Selma	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
134A:					
Camden	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
134B:					
Camden	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
134C2:					
Camden	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
152A:					
Drummer	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
172A:					
Hoopeston	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
175B:					
Lamont	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar-----	Eastern white pine
175C2:					
Lamont	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar-----	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
175D2:					
Lamont	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
175D3:					
Lamont	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
175F2:					
Lamont	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
201A:					
Gilford	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
224C2:					
Strawn	American hazelnut, common winterberry, gray dogwood, redosier dogwood	Blackhaw, common chokecherry, common pawpaw, nannyberry, roughleaf dogwood, silky dogwood	American sycamore, arborvitae, blue spruce, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Carolina poplar, eastern cottonwood	---
224D2:					
Strawn	American hazelnut, common winterberry, gray dogwood, redosier dogwood	Blackhaw, common chokecherry, common pawpaw, nannyberry, roughleaf dogwood, silky dogwood	American sycamore, arborvitae, blue spruce, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Carolina poplar, eastern cottonwood	---
224D3:					
Strawn	American hazelnut, common winterberry, gray dogwood, redosier dogwood	Blackhaw, common chokecherry, common pawpaw, nannyberry, roughleaf dogwood, silky dogwood	American sycamore, arborvitae, blue spruce, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Carolina poplar, eastern cottonwood	---
224F2:					
Strawn	American hazelnut, common winterberry, gray dogwood, redosier dogwood	Blackhaw, common chokecherry, common pawpaw, nannyberry, roughleaf dogwood, silky dogwood	American sycamore, arborvitae, blue spruce, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Carolina poplar, eastern cottonwood	---
227B:					
Argyle	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
227C2:					
Argyle	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
261A:					
Niota	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
268B:					
Mt. Carroll	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
268C2:					
Mt. Carroll	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
272A: Edgington	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
274B: Seaton	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
274C: Seaton	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
274C2: Seaton	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
274D2:					
Seaton	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
274D3:					
Seaton	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
274E2:					
Seaton	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
274F:					
Seaton	Common winterberry, coralberry, gray dogwood, mapleleaf viburnum, redosier dogwood	American hazelnut, American plum, blackhaw, prairie crabapple, roughleaf dogwood	Eastern redcedar, nannyberry, northern white-cedar, shadbush	Norway spruce, baldcypress, green ash, hackberry, tuliptree	Eastern cotton pin oak, east white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
275A:					
Joy	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
275B:					
Joy	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
277B:					
Port Byron	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
277C:					
Port Byron	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
277C2:					
Port Byron	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
279A:					
Rozetta	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
279B:					
Rozetta	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
280B:					
Fayette	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
280C:					
Fayette	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
280C2:					
Fayette	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
280C3:					
Fayette	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
280D2:					
Fayette	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
280D3:					
Fayette	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
280F2:					
Fayette	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
280G2:					
Fayette	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
403E2:					
Elizabeth	American plum, black chokeberry, blackhaw, common juniper, gray dogwood, mapleleaf viburnum	Cockspur hawthorn, common serviceberry, eastern redcedar, nannyberry, prairie crabapple	Bur oak, chinkapin oak, green ash, thornless honeylocust	---	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
410C2:					
Woodbine	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
410D2:					
Woodbine	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
410D3:					
Woodbine	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
410F2:					
Woodbine	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
410G2:					
Woodbine	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
411B:					
Ashdale	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
411C2:					
Ashdale	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
412B:					
Ogle	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
412C2:					
Ogle	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
412C3:					
Ogle	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
414B:					
Myrtle	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
414C2:					
Myrtle	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
416C2:					
Durand	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
416C3:					
Durand	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
417D3:					
Derinda	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar-----	---
417E2:					
Derinda	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar-----	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
419B:					
Flagg	Silky dogwood	American cranberrybush	Washington hawthorn, blue spruce, northern white-cedar, white fir	Austrian pine, Norway spruce	Pin oak, easte white pine
419C2:					
Flagg	Silky dogwood	American cranberrybush	Washington hawthorn, blue spruce, northern white-cedar, white fir	Austrian pine, Norway spruce	Pin oak, easte white pine
419D2:					
Flagg	Silky dogwood	American cranberrybush	Washington hawthorn, blue spruce, northern white-cedar, white fir	Austrian pine, Norway spruce	Pin oak, easte white pine
419D3:					
Flagg	Silky dogwood	American cranberrybush	Washington hawthorn, blue spruce, northern white-cedar, white fir	Austrian pine, Norway spruce	Pin oak, easte white pine
429C2:					
Palsgrove	Silky dogwood	American cranberrybush	Washington hawthorn, blue spruce, northern white-cedar, white fir	Austrian pine, Norway spruce	Pin oak, easte white pine
505D2:					
Dunbarton	American plum, black chokeberry, blackhaw, common juniper, gray dogwood, mapleleaf viburnum	Cockspur hawthorn, common serviceberry, eastern redcedar, nannyberry, prairie crabapple	Bur oak, chinkapin oak, green ash, thornless honeylocust	---	---
505D3:					
Dunbarton	American plum, black chokeberry, blackhaw, common juniper, gray dogwood, mapleleaf viburnum	Cockspur hawthorn, common serviceberry, eastern redcedar, nannyberry, prairie crabapple	Bur oak, chinkapin oak, green ash, thornless honeylocust	---	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
505E2:					
Dunbarton	American plum, black chokeberry, blackhaw, common juniper, gray dogwood, mapleleaf viburnum	Cockspur hawthorn, common serviceberry, eastern redcedar, nannyberry, prairie crabapple	Bur oak, chinkapin oak, green ash, thornless honeylocust	---	---
505E3:					
Dunbarton	American plum, black chokeberry, blackhaw, common juniper, gray dogwood, mapleleaf viburnum	Cockspur hawthorn, common serviceberry, eastern redcedar, nannyberry, prairie crabapple	Bur oak, chinkapin oak, green ash, thornless honeylocust	---	---
505F2:					
Dunbarton	American plum, black chokeberry, blackhaw, common juniper, gray dogwood, mapleleaf viburnum	Cockspur hawthorn, common serviceberry, eastern redcedar, nannyberry, prairie crabapple	Bur oak, chinkapin oak, green ash, thornless honeylocust	---	---
505G:					
Dunbarton	American plum, black chokeberry, blackhaw, common juniper, gray dogwood, mapleleaf viburnum	Cockspur hawthorn, common serviceberry, eastern redcedar, nannyberry, prairie crabapple	Bur oak, chinkapin oak, green ash, thornless honeylocust	---	---
506C2:					
Hitt	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
506C3:					
Hitt	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
546C2:					
Keltner	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
547C2:					
Eleroy	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
547D2:					
Eleroy	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
564B:					
Waukegan	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
564C2:					
Waukegan	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
565B:					
Tell	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
565C2:					
Tell	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
565D2:					
Tell	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
565D3:					
Tell	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
565F2:					
Tell	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
569F2:					
Medary	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
572C2:					
Loran	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
576A:					
Zwingle	American cranberrybush, American hazelnut, black chokeberry, common juniper, coralberry, gray dogwood, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, Washington hawthorn, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, staghorn sumac	Virginia pine, arborvitae, black oak, blackgum, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Norway spruce	Carolina poplar,
576B:					
Zwingle	American cranberrybush, American hazelnut, black chokeberry, common juniper, coralberry, gray dogwood, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, Washington hawthorn, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, staghorn sumac	Virginia pine, arborvitae, black oak, blackgum, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Norway spruce	Carolina poplar,

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
576C:					
Zwingle	American cranberrybush, American hazelnut, black chokeberry, common juniper, coralberry, gray dogwood, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, Washington hawthorn, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, staghorn sumac	Virginia pine, arborvitae, black oak, blackgum, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Norway spruce	Carolina poplar,
660D2:					
Coatsburg	American cranberrybush, American hazelnut, black chokeberry, common juniper, coralberry, gray dogwood, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, Washington hawthorn, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, staghorn sumac	Virginia pine, arborvitae, black oak, blackgum, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Norway spruce	Carolina poplar,
660D3:					
Coatsburg	American cranberrybush, American hazelnut, black chokeberry, common juniper, coralberry, gray dogwood, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, Washington hawthorn, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, staghorn sumac	Virginia pine, arborvitae, black oak, blackgum, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Norway spruce	Carolina poplar,

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
675A:					
Greenbush	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
675B:					
Greenbush	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
675C:					
Greenbush	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina popla eastern cotto eastern white
675C2:					
Greenbush	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
689B:					
Coloma	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine
689D:					
Coloma	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine
689F:					
Coloma	American hazelnut, common elderberry, common winterberry, coralberry, mapleleaf viburnum, silky dogwood	American plum, American witchhazel, alternateleaf dogwood, blackhaw, common chokecherry, common serviceberry, nannyberry, prairie crabapple, roughleaf dogwood, southern arrowwood, staghorn sumac	Washington hawthorn, blue spruce, common hackberry, eastern redcedar, green ash, red maple	Carolina poplar	Eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
735D2:					
Casco	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
Rodman	American plum, black chokeberry, blackhaw, common juniper, gray dogwood, mapleleaf viburnum	Cockspur hawthorn, common serviceberry, eastern redcedar, nannyberry, prairie crabapple	Bur oak, chinkapin oak, green ash, thornless honeylocust	---	---
Fox	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
735E2:					
Casco	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
Rodman	American plum, black chokeberry, blackhaw, common juniper, gray dogwood, mapleleaf viburnum	Cockspur hawthorn, common serviceberry, eastern redcedar, nannyberry, prairie crabapple	Bur oak, chinkapin oak, green ash, thornless honeylocust	---	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
735E2:					
Fox	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
764B:					
Coyne	American hazelnut, black chokeberry, common winterberry, coralberry, gray dogwood, mapleleaf viburnum	American plum, American witchhazel, Arnold hawthorn, blackhaw, common chokecherry, common serviceberry, prairie crabapple	Douglas fir, arborvitae, black walnut, blackgum, blue spruce, bur oak, eastern redcedar, green ash, pecan	Norway spruce, common hackberry, common hackberry, pin oak, tuliptree	Carolina poplar, Carolina popl eastern white pine eastern white pine
785G:					
Lacrescent	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
798C2:					
Fayette	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
798C2:					
Gale	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
802B.					
Orthents					
835G:					
Earthen dam					
862, 864, 865.					
Pits					
905F:					
NewGlarus	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
Lamoille	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
905G:					
NewGlarus	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
Lamoille	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
928C2:					
NewGlarus	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
Palsgrove	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
928D2:					
NewGlarus	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
Palsgrove	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
943F2:					
Seaton	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
Timula	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
943G2:					
Seaton	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
Timula	American hazelnut, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, coralberry, mapleleaf viburnum, redosier dogwood, silky dogwood	American plum, American witchhazel, blackhaw, common chokecherry, common serviceberry, prairie crabapple, roughleaf dogwood, smooth sumac, southern arrowwood	Washington hawthorn, arborvitae, blue spruce, common persimmon, eastern redcedar, nannyberry, pecan, white oak	Douglas fir, Norway spruce, black walnut, blackgum, common hackberry, green ash, northern red oak, pin oak, tuliptree	Carolina poplar, eastern cottonwood, eastern white pine
952C2:					
Tell	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar-----	---
Lamont	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar-----	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
952D2:					
Tell	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
Lamont	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
952D3:					
Tell	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
Lamont	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
952F2:					
Tell	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
Lamont	American cranberrybush, American hazelnut, black chokeberry, common chokecherry, common elderberry, common juniper, coralberry, mapleleaf viburnum, silky dogwood	American plum, bur oak, chinkapin oak, common serviceberry, eastern redcedar, nannyberry, prairie crabapple, roughleaf dogwood, smooth sumac	Black oak, common hackberry, eastern white pine, green ash	Carolina poplar	---
1076A:					
Otter	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
1082A:					
Millington	Common winterberry, gray dogwood, redosier dogwood	Common pawpaw, nannyberry, roughleaf dogwood, silky dogwood	Arborvitae, bur oak, common hackberry, eastern redcedar, green hawthorn	Carolina poplar, eastern cottonwood, green ash	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
1107A:					
Sawmill	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
1239A:					
Dorchester	Common winterberry, gray dogwood, redosier dogwood, silky dogwood	Blackhaw, common pawpaw, common serviceberry, downy arrowwood, roughleaf dogwood, southern arrowwood	Austrian pine, arborvitae, bur oak, common hackberry, eastern redcedar, green ash, green hawthorn, nannyberry	Carolina poplar, eastern cottonwood	---
1451A:					
Lawson	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
3076A:					
Otter	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
3082A:					
Millington	Common winterberry, gray dogwood, redosier dogwood	Common pawpaw, nannyberry, roughleaf dogwood, silky dogwood	Arborvitae, bur oak, common hackberry, eastern redcedar, green hawthorn	Carolina poplar, eastern cottonwood, green ash	---
3107+:					
Sawmill	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
3107A:					
Sawmill	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
3333A:					
Wakeland	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
3415A:					
Orion	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
3451A:					
Lawson	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
3579A:					
Beavercreek	Common winterberry, gray dogwood, redosier dogwood, silky dogwood	Blackhaw, common pawpaw, common serviceberry, downy arrowwood, roughleaf dogwood, southern arrowwood	Austrian pine, arborvitae, bur oak, common hackberry, eastern redcedar, green ash, green hawthorn, nannyberry	Carolina poplar, eastern cottonwood	---

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
3646L:					
Fluvaquents	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
7076A:					
Otter	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
7082A:					
Millington	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
7100A:					
Palms	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Common serviceberry, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, common persimmon	Green ash, pin oak, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood,
7107+:					
Sawmill	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
7107A:					
Sawmill	American cranberrybush, black chokeberry, buttonbush, common elderberry, common ninebark, common winterberry, gray dogwood, highbush blueberry, northern spicebush, redosier dogwood, silky dogwood	Cockspur hawthorn, hazel alder, nannyberry, roughleaf dogwood	Arborvitae, blackgum, common hackberry, green hawthorn, northern white-cedar, shingle oak	Green ash, red maple, river birch, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
7415A: Orion	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
7451A: Lawson	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
7452A: Riley	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
8077A:					
Huntsville	American cranberrybush, Canada yew, black chokeberry, common elderberry, common juniper, common ninebark, common winterberry, northern spicebush, redosier dogwood, silky dogwood	Blackhaw, cockspur hawthorn, common pawpaw, common serviceberry, prairie crabapple, roughleaf dogwood, rusty blackhaw, southern arrowwood, witchhazel	Austrian pine, Douglas fir, arborvitae, blue spruce, common persimmon, eastern redcedar, green hawthorn, nannyberry, pecan, shingle oak	Norway spruce, blackgum, common hackberry, green ash, red maple, swamp white oak, sweetgum	Carolina poplar, eastern cottonwood, pin oak
8239A:					
Dorchester	American hazelnut, common winterberry, gray dogwood, redosier dogwood	Blackhaw, common chokecherry, common pawpaw, nannyberry, roughleaf dogwood, silky dogwood	American sycamore, arborvitae, blue spruce, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash	Carolina poplar, eastern cottonwood	---
8239B:					
Dorchester	Common winterberry, gray dogwood, redosier dogwood, silky dogwood	Blackhaw, common pawpaw, common serviceberry, downy arrowwood, roughleaf dogwood, southern arrowwood	Austrian pine, arborvitae, bur oak, common hackberry, eastern redcedar, green ash, green hawthorn, nannyberry	Carolina poplar, eastern cottonwood	---

Table 10.--Forestland Productivity

(Only the soils commonly used for production of commercial trees are listed)

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
21B:				
Pecatonica	Black walnut	---	---	Black walnut, eastern white pine, green ash, northern red oak, red pine, sugar maple, white oak.
	Northern red oak	80	57	
	White oak	80	57	
21C2:				
Pecatonica	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
21C3:				
Pecatonica	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
21D2:				
Pecatonica	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
21D3:				
Pecatonica	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
21F2:				
Pecatonica	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
29D3:				
Dubuque	Northern red oak	65	43	Black oak, common hackberry, eastern white pine, green ash.
	White oak	65	43	
37A:				
Worthen	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
37B:				
Worthen	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
37C:				
Worthen	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
51A:				
Muscatune	---	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
51B:				
Muscatune	---	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
61A:				
Atterberry	Bur oak	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
61B:				
Atterberry	Bur oak	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
68A:				
Sable	---	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
68A+:				
Sable	---	---	---	---
81A:				
Littleton	---	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
81B:				
Littleton	---	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
86A:				
Osco	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
86B:				
Osco	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
86C:				
Osco	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
86C2:				
Osco	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
86C3:				
Osco	---	---	---	---
87A:				
Dickinson	---	---	---	Black oak, common hackberry, eastern white pine, green ash.
87B:				
Dickinson	---	---	---	Black oak, common hackberry, eastern white pine, green ash.
87C2:				
Dickinson	---	---	---	Black oak, common hackberry, eastern white pine, green ash.
88A:				
Sparta	Eastern white pine	---	---	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	Jack pine	---	---	
	Northern red oak	70	57	
	Red pine	---	---	
88B:				
Sparta	Eastern white pine	---	---	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	Jack pine	---	---	
	Northern red oak	70	57	
	Red pine	---	---	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
88C:				
Sparta	Eastern white pine	---	---	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	Jack pine	---	---	
	Northern red oak	70	57	
	Red pine	---	---	
88E:				
Sparta	Eastern white pine	---	---	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	Jack pine	---	---	
	Northern red oak	70	57	
	Red pine	---	---	
98A:				
Ade	---	---	---	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
98B:				
Ade	---	---	---	Black walnut, bur oak, eastern white pine, pecan, pin oak, tuliptree.
98D:				
Ade	---	---	---	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
125A:				
Selma	---	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
134A:				
Camden	Green ash	76	72	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	85	72	
	Sweetgum	80	86	
	Tuliptree	95	100	
	White oak	85	72	
134B:				
Camden	Green ash	76	72	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	85	72	
	Sweetgum	80	86	
	Tuliptree	95	100	
	White oak	85	72	
134C2:				
Camden	Northern red oak	85	72	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	White oak	85	72	
	Green ash	76	72	
	Sweetgum	80	86	
	Tuliptree	95	100	
152A:				
Drummer	---	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
172A:				
Hoopeston	---	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
175B:				
Lamont	Northern red oak	55	43	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	White oak	55	43	
175C2:				
Lamont	Northern red oak	55	43	Eastern white pine.
	White oak	55	43	
175D2:				
Lamont	Northern red oak	55	43	Black walnut, bur oak, eastern white pine, pin oak, tuliptree.
	White oak	55	43	
175D3:				
Lamont	Northern red oak	55	43	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	White oak	55	43	
175F2:				
Lamont	Northern red oak	55	43	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	White oak	55	43	
201A:				
Gilford	Bigtooth aspen	70	86	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
	Eastern white pine	55	100	
	Pin oak	70	57	
	Red maple	60	43	
224C2:				
Strawn	Black walnut	---	---	Bur oak, chinkapin oak, common hackberry, eastern cottonwood, eastern redcedar, green ash.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
224D2:				
Strawn	Black walnut	---	---	Bur oak, chinkapin oak, common hackberry, eastern cottonwood, eastern redcedar, green ash.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
224D3:				
Strawn	Black walnut	---	---	Bur oak, chinkapin oak, common hackberry, eastern cottonwood, eastern redcedar, green ash.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
224F2:				
Strawn	Black walnut	---	---	Bur oak, chinkapin oak, common hackberry, eastern cottonwood, eastern redcedar, green ash.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
227B:				
Argyle	Black walnut	---	---	Scotch pine, black walnut, eastern white pine, green ash, northern red oak, red pine, white oak.
	Northern red oak	---	---	
	White oak	80	57	
227C2:				
Argyle	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	---	---	
	White oak	80	57	
261A:				
Niota	Green ash	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
	Pin oak	80	57	
	Tuliptree	80	72	
	White oak	65	43	
268B:				
Mt. Carroll	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
268C2:				
Mt. Carroll	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
272A:				
Edgington	---	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
274B:				
Seaton	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	90	72	
274C:				
Seaton	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	90	72	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
274C2:				
Seaton	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	90	72	
274D2:				
Seaton	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	90	72	
274D3:				
Seaton	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	90	72	
274E2:				
Seaton	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	90	72	
274F:				
Seaton	Northern red oak	80	57	White oak, northern red oak, pecan, green ash, baldcypress.
	White oak	90	72	
	Black walnut	---	---	
	Tuliptree	90	86	
275A:				
Joy	---	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
275B:				
Joy	---	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
277B:				
Port Byron	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
277C:				
Port Byron	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			
	Common trees	Site index	Volume of wood fiber	Suggested trees to plant
			cu ft/acre	
277C2:				
Port Byron	---	---	---	---
279A:				
Rozetta	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
279B:				
Rozetta	White oak	80	57	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	Black walnut	---	---	
280B:				
Fayette	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
280C:				
Fayette	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
280C2:				
Fayette	Northern red oak	80	57	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	White oak	80	57	
	Black walnut	---	---	
	Tuliptree	90	86	
280C3:				
Fayette	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
280D2:				
Fayette	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
280D3:				
Fayette	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
280F2:				
Fayette	Black walnut	---	---	Eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
280G2:				
Fayette	Black walnut	---	---	Eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
403E2:				
Elizabeth	Black oak	60	43	Bur oak, chinkapin oak, eastern redcedar, green ash, thornless honeylocust.
	Bur oak	60	43	
	Eastern redcedar	---	---	
	Northern red oak	---	---	
	Shagbark hickory	---	---	
410C2:				
Woodbine	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
410D2:				
Woodbine	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
410D3:				
Woodbine	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
410F2:				
Woodbine	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
410G2:				
Woodbine	Bur oak	---	---	Eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
411B:				
Ashdale	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
411C2:				
Ashdale	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
412B:				
Ogle	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
412C2:				
Ogle	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
412C3:				
Ogle	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
414B:				
Myrtle	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
414C2:				
Myrtle	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
416C2:				
Durand	---	---	---	---
416C3:				
Durand	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
417D3:				
Derinda	Bur oak	---	---	Eastern redcedar, eastern white pine, red pine.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
417E2:				
Derinda	Bur oak	---	---	Eastern redcedar, eastern white pine, red pine.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
419B:				
Flagg	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
419C2:				
Flagg	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
419D2:				
Flagg	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
419D3:				
Flagg	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	White oak	80	57	
429C2:				
Palsgrove	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
505D2:				
Dunbarton	Black oak	---	---	Bur oak, chinkapin oak, eastern redcedar, green ash, honeylocust.
	Northern red oak	61	57	
	Shagbark hickory	---	---	
	White oak	---	---	
505D3:				
Dunbarton	Black oak	---	---	Bur oak, chinkapin oak, eastern redcedar, green ash, honeylocust.
	Northern red oak	61	57	
	Shagbark hickory	---	---	
	White oak	---	---	
505E2:				
Dunbarton	Black oak	---	---	Bur oak, chinkapin oak, eastern redcedar, green ash, honeylocust.
	Northern red oak	61	57	
	Shagbark hickory	---	---	
	White oak	---	---	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
505E3:				
Dunbarton	Black oak	---	---	Bur oak, chinkapin oak, eastern redcedar, green ash, honeylocust.
	Northern red oak	61	57	
	Shagbark hickory	---	---	
	White oak	---	---	
505F2:				
Dunbarton	Black oak	---	---	Bur oak, chinkapin oak, eastern redcedar, green ash, honeylocust.
	Northern red oak	61	57	
	Shagbark hickory	---	---	
	White oak	---	---	
505G:				
Dunbarton	Black oak	---	---	Bur oak, chinkapin oak, eastern redcedar, green ash, honeylocust.
	Northern red oak	61	57	
	Shagbark hickory	---	---	
	White oak	---	---	
506C2:				
Hitt	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
506C3:				
Hitt	---	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
546C2:				
Keltner	---	---	---	---
547C2:				
Eleroy	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	---	---	
	White oak	70	57	
547D2:				
Eleroy	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	---	---	
	White oak	70	57	
564B:				
Waukegan	---	---	---	Black oak, common hackberry, eastern white pine, green ash.
564C2:				
Waukegan	---	---	---	Black oak, common hackberry, eastern white pine, green ash.

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
565B:				
Tell	Northern red oak	75	57	Black oak, common hackberry, eastern white pine, green ash, red pine.
	White oak	75	57	
565C2:				
Tell	Northern red oak	75	57	Black oak, common hackberry, eastern white pine, green ash, red pine.
	White oak	75	57	
565D2:				
Tell	Northern red oak	75	57	Black oak, common hackberry, eastern white pine, green ash, red pine.
	White oak	75	57	
565D3:				
Tell	Northern red oak	75	57	Black oak, common hackberry, eastern white pine, green ash, red pine.
	White oak	75	57	
565F2:				
Tell	Northern red oak	75	57	Black oak, common hackberry, eastern white pine, green ash, red pine.
	White oak	75	57	
569F2:				
Medary	American basswood	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	65	57	
	Silver maple	---	---	
572C2:				
Loran	---	---	---	---
576A:				
Zwingle	Eastern cottonwood	90	100	Black oak, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash.
	Silver maple	80	29	
576B:				
Zwingle	Eastern cottonwood	90	100	Black oak, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash.
	Silver maple	80	29	
576C:				
Zwingle	Eastern cottonwood	90	100	Black oak, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash.
	Silver maple	80	29	
660D2:				
Coatsburg	---	---	---	Black oak, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash.
660D3:				
Coatsburg	---	---	---	Black oak, bur oak, chinkapin oak, common hackberry, eastern redcedar, green ash.

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
675A:				
Greenbush	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	80	57	
675B:				
Greenbush	White oak	80	57	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Black walnut	---	---	
	Tuliptree	90	86	
675C:				
Greenbush	White oak	80	57	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Black walnut	---	---	
	Tuliptree	90	86	
675C2:				
Greenbush	White oak	80	57	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Black walnut	---	---	
	Tuliptree	90	86	
689B:				
Coloma	Eastern white pine	85	200	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	Jack pine	68	100	
	Red pine	78	143	
	White oak	70	72	
689D:				
Coloma	Eastern white pine	85	200	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	Jack pine	68	100	
	Red pine	78	143	
	White oak	70	72	
689F:				
Coloma	Eastern white pine	85	200	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	Jack pine	68	100	
	Red pine	78	143	
	White oak	70	72	
735D2:				
Casco	Eastern white pine	85	200	Black oak, common hackberry, eastern white pine, green ash.
	Jack pine	68	100	
	Red pine	78	143	
	White oak	70	57	
Rodman	Northern red oak	45	29	Bur oak, chinkapin oak, eastern redcedar, green ash, honeylocust.
	Shagbark hickory	---	---	
	White oak	---	---	
Fox	Northern red oak	80	57	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Sugar maple	---	---	
	White oak	---	---	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
735E2:				
Casco	Eastern white pine	85	200	Black oak, common hackberry, eastern white pine, green ash.
	Jack pine	68	100	
	Red pine	78	143	
	White oak	70	57	
Rodman	Northern red oak	45	29	Bur oak, chinkapin oak, eastern redcedar, green ash, honeylocust.
	Shagbark hickory	---	---	
	White oak	---	---	
Fox	Northern red oak	80	57	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Sugar maple	---	---	
	White oak	---	---	
764B:				
Coyne	---	---	---	Black walnut, bur oak, eastern white pine, pecan, pin oak, tuliptree.
785G:				
Lacrescent	American basswood	62	57	Bur oak, chinkapin oak, eastern redcedar, green ash, honeylocust.
	Northern red oak	59	43	
	White oak	55	43	
798C2:				
Fayette	Northern red oak	80	57	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	White oak	80	57	
	Black walnut	---	---	
	Tuliptree	90	86	
Gale	Northern red oak	74	72	Black oak, common hackberry, eastern white pine, green ash.
	Sugar maple	---	---	
	White oak	---	---	
905F:				
NewGlarus	Black walnut	---	---	Black oak, common hackberry, eastern white pine, green ash.
	Green ash	---	---	
	Northern red oak	80	57	
	Tuliptree	88	86	
	White ash	---	---	
Lamoille	American basswood	55	29	Black oak, common hackberry, eastern white pine, green ash.
	Green ash	52	29	
	Northern red oak	55	43	
	Shagbark hickory	50	---	
	Sugar maple	50	29	
	White oak	52	29	
905G:				
NewGlarus	Black walnut	---	---	Black oak, common hackberry, eastern white pine, green ash.
	Green ash	---	---	
	Northern red oak	80	57	
	Tuliptree	88	86	
	White ash	---	---	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
905G:				
Lamoille	American basswood	55	29	Black oak, common hackberry, eastern white pine, green ash.
	Green ash	52	29	
	Northern red oak	55	43	
	Shagbark hickory	50	---	
	Sugar maple	50	29	
	White oak	52	29	
928C2:				
NewGlarus	Black walnut	---	---	Black oak, common hackberry, eastern white pine, green ash.
	Green ash	---	---	
	Northern red oak	80	57	
	Tuliptree	88	86	
	White ash	---	---	
Palsgrove	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
928D2:				
NewGlarus	Black walnut	---	---	Black oak, common hackberry, eastern white pine, green ash.
	Green ash	---	---	
	Northern red oak	80	57	
	Tuliptree	88	86	
	White ash	---	---	
Palsgrove	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	70	57	
	White oak	70	57	
943F2:				
Seaton	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	90	72	
Timula	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	---	---	
	White oak	70	57	
943G2:				
Seaton	Black walnut	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Northern red oak	80	57	
	Tuliptree	90	86	
	White oak	90	72	
Timula	Bur oak	---	---	Black walnut, eastern cottonwood, eastern white pine, green ash, northern red oak, pecan, pin oak, tuliptree, white oak.
	Green ash	---	---	
	Northern red oak	---	---	
	White oak	70	57	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
952C2:				
Tell	Northern red oak	75	57	Black oak, common hackberry, eastern white pine, green ash, red pine.
	White oak	75	57	
Lamont	Northern red oak	55	43	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	White oak	55	43	
952D2:				
Tell	Northern red oak	75	57	Black oak, common hackberry, eastern white pine, green ash, red pine.
	White oak	75	57	
Lamont	Northern red oak	55	43	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	White oak	55	43	
952D3:				
Tell	Northern red oak	75	57	Black oak, common hackberry, eastern white pine, green ash, red pine.
	White oak	75	57	
Lamont	Northern red oak	55	43	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	White oak	55	43	
952F2:				
Tell	Northern red oak	75	57	Black oak, common hackberry, eastern white pine, green ash, red pine.
	White oak	75	57	
Lamont	Northern red oak	55	43	Common hackberry, eastern redcedar, eastern white pine, green ash, red maple, red pine, shortleaf pine.
	White oak	55	43	
1076A:				
Otter	Silver maple	94	43	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
1082A:				
Millington	American sycamore	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
	Common hackberry	---	---	
	Eastern cottonwood	90	100	
	Silver maple	80	29	
1107A:				
Sawmill	American sycamore	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
	Cherrybark oak	---	---	
	Eastern cottonwood	---	---	
	Pin oak	90	72	
	Sweetgum	---	---	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
1239A:				
Dorchester	Northern red oak	55	43	Austrian pine, Scotch pine, common hackberry, cottonwood, green ash, ponderosa pine.
	White oak	55	43	
1451A:				
Lawson	Silver maple	70	29	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
	White ash	---	---	
3076A:				
Otter	Silver maple	94	43	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
3082A:				
Millington	American sycamore	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
	Common hackberry	---	---	
	Eastern cottonwood	90	100	
	Silver maple	80	29	
3107+:				
Sawmill	American sycamore	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum, tamarack.
	Cherrybark oak	---	---	
	Eastern cottonwood	---	---	
	Pin oak	90	72	
	Sweetgum	---	---	
3107A:				
Sawmill	Pin oak	90	72	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
	American sycamore	---	---	
	Eastern cottonwood	---	---	
	Sweetgum	---	---	
3333A:				
Wakeland	Eastern cottonwood	99	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
	Pin oak	90	---	
3415A:				
Orion	Red maple	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
	Silver maple	80	29	
	White ash	---	---	
3451A:				
Lawson	Silver maple	70	29	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
	White ash	---	---	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
3579A:				
Beavercreek	Black walnut	55	---	Bur oak, common hackberry, eastern cottonwood, eastern redcedar, green ash.
	Butternut	55	---	
	Eastern white pine	50	86	
	Northern red oak	55	43	
	White oak	55	43	
3646L:				
Fluvaquents	Pin oak	76	57	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
7076A:				
Otter	Silver maple	94	43	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
7082A:				
Millington	American sycamore	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
	Common hackberry	---	---	
	Eastern cottonwood	90	100	
	Silver maple	80	29	
7100A:				
Palms	Black willow	---	---	Common persimmon, eastern cottonwood, green ash, pin oak, swamp white oak, sweetgum, tamarack.
	Quaking aspen	56	57	
	Red maple	51	29	
	Silver maple	76	29	
	White ash	51	29	
7107+:				
Sawmill	American sycamore	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum.
	Cherrybark oak	---	---	
	Eastern cottonwood	---	---	
	Pin oak	90	72	
	Sweetgum	---	---	
7107A:				
Sawmill	American sycamore	---	---	Common hackberry, eastern cottonwood, green ash, pin oak, river birch, swamp white oak, sweetgum, tamarack.
	Cherrybark oak	---	---	
	Eastern cottonwood	---	---	
	Pin oak	90	72	
	Sweetgum	---	---	
7415A:				
Orion	Red maple	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
	Silver maple	80	29	
	White ash	---	---	
7451A:				
Lawson	Silver maple	70	29	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
	White ash	---	---	

Table 10.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity			Suggested trees to plant
	Common trees	Site index	Volume of wood fiber	
			cu ft/acre	
7452A:				
Riley	---	---	---	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
8077A:				
Huntsville	Eastern cottonwood	110	157	Common hackberry, common persimmon, eastern cottonwood, green ash, pecan, pin oak, swamp white oak.
	American sycamore	---	---	
	Green ash	---	---	
8239A:				
Dorchester	Northern red oak	55	43	Bur oak, common hackberry, eastern cottonwood, eastern redcedar, green ash.
	White oak	55	43	
8239B:				
Dorchester	Northern red oak	55	43	Bur oak, common hackberry, eastern cottonwood, eastern redcedar, green ash.
	White oak	55	43	

Table 11a.--Forestland Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
21C2:						
Pecatonica	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
21C3:						
Pecatonica	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
21D2:						
Pecatonica	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
21D3:						
Pecatonica	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
21F2:						
Pecatonica	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
29D3:						
Dubuque	Moderate		Poorly suited		Severe	
	Restrictive layer	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
37A:						
Worthen	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
37B:						
Worthen	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
37C:						
Worthen	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
51A:						
Muscatune	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Wetness	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51B:						
Muscatune	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Wetness	0.50		
61A:						
Atterberry	Moderate		Moderately suited		Severe	
	Low strength	0.50	Wetness	0.50	Low strength	1.00
			Low strength	0.50		
61B:						
Atterberry	Moderate		Moderately suited		Severe	
	Low strength	0.50	Wetness	0.50	Low strength	1.00
			Low strength	0.50		
68A:						
Sable	Moderate		Poorly suited		Severe	
	Low strength	0.50	Wetness	1.00	Low strength	1.00
			Ponding	0.50		
			Low strength	0.50		
68A+:						
Sable	Moderate		Poorly suited		Severe	
	Low strength	0.50	Wetness	1.00	Low strength	1.00
			Ponding	0.50		
			Low strength	0.50		
81A:						
Littleton	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Wetness	0.50		
81B:						
Littleton	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Wetness	0.50		
86A:						
Osco	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
86B:						
Osco	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
86C:						
Osco	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
86C2:						
Osco	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
86C3:						
Osco	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
87A:						
Dickinson	Slight		Well suited		Moderate	
					Low strength	0.50
87B:						
Dickinson	Slight		Well suited		Moderate	
					Low strength	0.50
87C2:						
Dickinson	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50
88A:						
Sparta	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
88B:						
Sparta	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
88C:						
Sparta	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Slope	0.50	Low strength	0.50
			Sandiness	0.50		
88E:						
Sparta	Moderate		Poorly suited		Moderate	
	Slope	0.50	Slope	1.00	Low strength	0.50
	Sandiness	0.50	Sandiness	0.50		
98A:						
Ade	Slight		Well suited		Moderate	
					Low strength	0.50
98B:						
Ade	Slight		Well suited		Moderate	
					Low strength	0.50
98D:						
Ade	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50
125A:						
Selma	Moderate		Poorly suited		Severe	
	Low strength	0.50	Wetness	1.00	Low strength	1.00
			Ponding	0.50		
			Low strength	0.50		
134A:						
Camden	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
134B:						
Camden	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
134C2:						
Camden	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
152A:						
Drummer	Moderate		Poorly suited		Severe	
	Low strength	0.50	Wetness	1.00	Low strength	1.00
			Ponding	0.50		
			Low strength	0.50		
172A:						
Hoopeston	Slight		Moderately suited		Moderate	
			Wetness	0.50	Low strength	0.50
175B:						
Lamont	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
175C2:						
Lamont	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
175D2:						
Lamont	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
175D3:						
Lamont	Slight		Poorly suited		Severe	
			Slope	1.00	Low strength	1.00
			Low strength	0.50		
175F2:						
Lamont	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
201A:						
Gilford	Slight		Poorly suited		Moderate	
			Wetness	1.00	Low strength	0.50
			Ponding	0.50		
224C2:						
Strawn	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
224D2:						
Strawn	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
224D3:						
Strawn	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
224F2:						
Strawn	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
227B:						
Argyle	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
227C2:						
Argyle	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
261A:						
Niota	Moderate		Poorly suited		Severe	
	Low strength	0.50	Ponding	1.00	Low strength	1.00
			Wetness	1.00		
			Low strength	0.50		
268B:						
Mt. Carroll	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
268C2:						
Mt. Carroll	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
272A:						
Edgington	Moderate		Poorly suited		Severe	
	Low strength	0.50	Ponding	1.00	Low strength	1.00
			Wetness	1.00		
			Low strength	0.50		
274B:						
Seaton	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
274C:						
Seaton	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
274C2:						
Seaton	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
274D2:						
Seaton	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
274D3:						
Seaton	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
274E2:						
Seaton	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
274F:						
Seaton	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
275A:						
Joy	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Wetness	0.50		
275B:						
Joy	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Wetness	0.50		
277B:						
Port Byron	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
277C:						
Port Byron	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
277C2:						
Port Byron	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
279A:						
Rozetta	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
279B:						
Rozetta	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
280B:						
Fayette	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
280C:						
Fayette	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
280C2:						
Fayette	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
280C3:						
Fayette	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
280D2:						
Fayette	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
280D3:						
Fayette	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
280F2:						
Fayette	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
280G2:						
Fayette	Severe		Poorly suited		Severe	
	Slope	1.00	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
403E2:						
Elizabeth	Severe		Poorly suited		Severe	
	Restrictive layer	1.00	Slope	1.00	Low strength	1.00
	Slope	0.50	Low strength	0.50		
	Low strength	0.50				
410C2:						
Woodbine	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
410D2:						
Woodbine	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
410D3:						
Woodbine	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
410F2:						
Woodbine	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Restrictive layer	0.50	Low strength	0.50		
	Low strength	0.50				
410G2:						
Woodbine	Severe		Poorly suited		Severe	
	Slope	1.00	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
411B:						
Ashdale	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
411C2:						
Ashdale	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
412B:						
Ogle	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
412C2:						
Ogle	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
412C3:						
Ogle	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
414B:						
Myrtle	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
414C2:						
Myrtle	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
416C2:						
Durand	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
416C3:						
Durand	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
417D3:						
Derinda	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
417E2:						
Derinda	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
419B:						
Flagg	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
419C2:						
Flagg	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
419D2:						
Flagg	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
419D3:						
Flagg	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
429C2:						
Palsgrove	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
505D2:						
Dunbarton	Severe		Moderately suited		Severe	
	Restrictive layer	1.00	Slope	0.50	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
505D3:						
Dunbarton	Severe		Moderately suited		Severe	
	Restrictive layer	1.00	Slope	0.50	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
505E2:						
Dunbarton	Severe		Poorly suited		Severe	
	Restrictive layer	1.00	Slope	1.00	Low strength	1.00
	Slope	0.50	Low strength	0.50		
	Stickiness/slope	0.50				
	Low strength	0.50				
505E3:						
Dunbarton	Severe		Poorly suited		Severe	
	Restrictive layer	1.00	Slope	1.00	Low strength	1.00
	Slope	0.50	Low strength	0.50		
	Stickiness/slope	0.50				
	Low strength	0.50				
505F2:						
Dunbarton	Severe		Poorly suited		Severe	
	Restrictive layer	1.00	Slope	1.00	Low strength	1.00
	Slope	0.50	Low strength	0.50		
	Stickiness/slope	0.50				
	Low strength	0.50				
505G:						
Dunbarton	Severe		Poorly suited		Severe	
	Slope	1.00	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
506C2:						
Hitt	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
506C3:						
Hitt	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
546C2:						
Keltner	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
547C2:						
Eleroy	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
547D2:						
Eleroy	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
564B:						
Waukegan	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
564C2:						
Waukegan	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
565B:						
Tell	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
565C2:						
Tell	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
565D2:						
Tell	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
565D3:						
Tell	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
565F2:						
Tell	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
569F2:						
Medary	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Stickiness/slope	0.50	Low strength	0.50		
	Low strength	0.50				
572C2:						
Loran	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
576A:						
Zwingle	Moderate		Poorly suited		Severe	
	Low strength	0.50	Wetness	1.00	Low strength	1.00
			Low strength	0.50		
576B:						
Zwingle	Moderate		Poorly suited		Severe	
	Low strength	0.50	Wetness	1.00	Low strength	1.00
			Low strength	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
576C:						
Zwingle	Moderate		Poorly suited		Severe	
	Low strength	0.50	Wetness	1.00	Low strength	1.00
			Low strength	0.50		
			Slope	0.50		
660D2:						
Coatsburg	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Wetness	1.00		
			Low strength	0.50		
660D3:						
Coatsburg	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Wetness	1.00		
			Low strength	0.50		
675A:						
Greenbush	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
675B:						
Greenbush	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
675C:						
Greenbush	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
675C2:						
Greenbush	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
689B:						
Coloma	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Sandiness	0.50	Low strength	0.50
689D:						
Coloma	Moderate		Moderately suited		Moderate	
	Sandiness	0.50	Slope	0.50	Low strength	0.50
			Sandiness	0.50		
689F:						
Coloma	Moderate		Poorly suited		Moderate	
	Slope	0.50	Slope	1.00	Low strength	0.50
	Sandiness	0.50	Sandiness	0.50		
735D2:						
Casco	Moderate		Moderately suited		Severe	
	Low strength	0.50	Slope	0.50	Low strength	1.00
			Low strength	0.50		
Rodman	Slight		Moderately suited		Moderate	
			Slope	0.50	Low strength	0.50

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
735D2:						
Fox	Slight		Moderately suited		Severe	
			Slope	0.50	Low strength	1.00
			Low strength	0.50		
735E2:						
Casco	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Sandiness	0.50	Low strength	0.50		
Rodman	Moderate		Poorly suited		Moderate	
	Slope	0.50	Slope	1.00	Low strength	0.50
	Sandiness	0.50				
Fox	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
764B:						
Coyne	Slight		Well suited		Moderate	
					Low strength	0.50
785G:						
Lacrescent	Severe		Poorly suited		Moderate	
	Slope	1.00	Slope	1.00	Low strength	0.50
798C2:						
Fayette	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
Gale	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
802B:						
Orthents	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
835G:						
Earthen dam	Slight		Well suited		Slight	
862:						
Pits	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	
865:						
Pits, gravel	Not rated		Not rated		Not rated	
905F:						
NewGlarus	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Restrictive layer	0.50	Low strength	0.50		
	Stickiness/slope	0.50				
	Low strength	0.50				

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
905F:						
Lamoille	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Stickiness/slope	0.50	Low strength	0.50		
	Low strength	0.50				
905G:						
NewGlarus	Severe		Poorly suited		Severe	
	Slope	1.00	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
Lamoille	Severe		Poorly suited		Severe	
	Slope	1.00	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
928C2:						
NewGlarus	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
	Restrictive layer	0.50	Slope	0.50		
Palsgrove	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
928D2:						
NewGlarus	Moderate		Poorly suited		Severe	
	Restrictive layer	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
Palsgrove	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
943F2:						
Seaton	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
Timula	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
943G2:						
Seaton	Severe		Poorly suited		Severe	
	Slope	1.00	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
Timula	Severe		Poorly suited		Severe	
	Slope	1.00	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
952C2:						
Tell	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		
Lamont	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Slope	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
952D2:						
Tell	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
Lamont	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
952D3:						
Tell	Moderate		Poorly suited		Severe	
	Low strength	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
Lamont	Slight		Poorly suited		Severe	
			Slope	1.00	Low strength	1.00
			Low strength	0.50		
952F2:						
Tell	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
Lamont	Moderate		Poorly suited		Severe	
	Slope	0.50	Slope	1.00	Low strength	1.00
			Low strength	0.50		
1076A:						
Otter	Severe		Poorly suited		Severe	
	Flooding	1.00	Ponding	1.00	Low strength	1.00
	Low strength	0.50	Flooding	1.00		
			Wetness	1.00		
			Low strength	0.50		
1082A:						
Millington	Severe		Poorly suited		Severe	
	Flooding	1.00	Ponding	1.00	Low strength	1.00
	Low strength	0.50	Flooding	1.00		
			Wetness	1.00		
			Low strength	0.50		
1107A:						
Sawmill	Severe		Poorly suited		Severe	
	Flooding	1.00	Ponding	1.00	Low strength	1.00
	Low strength	0.50	Flooding	1.00		
			Wetness	1.00		
			Low strength	0.50		
1239A:						
Dorchester	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Wetness	1.00		
			Low strength	0.50		
1451A:						
Lawson	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
			Wetness	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3076A:						
Otter	Severe		Poorly suited		Severe	
	Flooding	1.00	Ponding	1.00	Low strength	1.00
	Low strength	0.50	Flooding	1.00		
			Wetness	1.00		
			Low strength	0.50		
3082A:						
Millington	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Wetness	1.00		
			Low strength	0.50		
3107+:						
Sawmill	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Wetness	0.50		
			Low strength	0.50		
3107A:						
Sawmill	Severe		Poorly suited		Severe	
	Flooding	1.00	Ponding	1.00	Low strength	1.00
	Low strength	0.50	Flooding	1.00		
			Wetness	1.00		
			Low strength	0.50		
3333A:						
Wakeland	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Wetness	0.50		
			Low strength	0.50		
3415A:						
Orion	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
			Wetness	0.50		
3451A:						
Lawson	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
			Wetness	0.50		
3579A:						
Beavercreek	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
3646L:						
Fluvaquents	Severe		Poorly suited		Severe	
	Flooding	1.00	Ponding	1.00	Low strength	1.00
	Wetness	1.00	Flooding	1.00	Wetness	0.50
	Low strength	0.50	Wetness	1.00		
			Low strength	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7076A:						
Otter	Moderate		Poorly suited		Severe	
	Low strength	0.50	Ponding	1.00	Low strength	1.00
			Wetness	1.00		
			Low strength	0.50		
7082A:						
Millington	Moderate		Poorly suited		Severe	
	Low strength	0.50	Wetness	1.00	Low strength	1.00
			Ponding	0.50		
			Low strength	0.50		
7100A:						
Palms	Moderate		Poorly suited		Severe	
	Low strength	0.50	Ponding	1.00	Low strength	1.00
			Low strength	0.50		
7107+:						
Sawmill	Moderate		Moderately suited		Severe	
	Low strength	0.50	Wetness	0.50	Low strength	1.00
			Low strength	0.50		
7107A:						
Sawmill	Moderate		Moderately suited		Severe	
	Low strength	0.50	Wetness	0.50	Low strength	1.00
			Ponding	0.50		
			Low strength	0.50		
7415A:						
Orion	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Wetness	0.50		
7451A:						
Lawson	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Wetness	0.50		
7452A:						
Riley	Moderate		Moderately suited		Severe	
	Low strength	0.50	Low strength	0.50	Low strength	1.00
			Wetness	0.50		
8077A:						
Huntsville	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		
8239A:						
Dorchester	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		

Table 11a.--Forestland Management--Continued

Map symbol and soil name	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
8239B:						
Dorchester	Severe		Poorly suited		Severe	
	Flooding	1.00	Flooding	1.00	Low strength	1.00
	Low strength	0.50	Low strength	0.50		

Table 11b.--Forestland Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
21C2:						
Pecatonica	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
21C3:						
Pecatonica	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
21D2:						
Pecatonica	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
21D3:						
Pecatonica	Slight		Severe		Poorly suited	
			Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
21F2:						
Pecatonica	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
29D3:						
Dubuque	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
37A:						
Worthen	Slight		Slight		Moderately suited	
					Low strength	0.50
37B:						
Worthen	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
37C:						
Worthen	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
51A:						
Muscatune	Slight		Slight		Moderately suited	
					Low strength	0.50
					Wetness	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51B:						
Muscatune	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Wetness	0.50
61A:						
Atterberry	Slight		Slight		Moderately suited	
					Wetness	0.50
					Low strength	0.50
61B:						
Atterberry	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Wetness	0.50
					Low strength	0.50
68A:						
Sable	Slight		Slight		Poorly suited	
					Wetness	1.00
					Ponding	0.50
					Low strength	0.50
68A+:						
Sable	Slight		Slight		Poorly suited	
					Wetness	1.00
					Ponding	0.50
					Low strength	0.50
81A:						
Littleton	Slight		Slight		Moderately suited	
					Low strength	0.50
					Wetness	0.50
81B:						
Littleton	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Wetness	0.50
86A:						
Osco	Slight		Slight		Moderately suited	
					Low strength	0.50
86B:						
Osco	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
86C:						
Osco	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
86C2:						
Osco	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
86C3:						
Osco	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
87A:						
Dickinson	Slight		Slight		Well suited	
87B:						
Dickinson	Slight		Slight		Well suited	
87C2:						
Dickinson	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
88A:						
Sparta	Slight		Slight		Moderately suited	
					Sandiness	0.50
88B:						
Sparta	Slight		Slight		Moderately suited	
					Sandiness	0.50
88C:						
Sparta	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
					Sandiness	0.50
88E:						
Sparta	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Sandiness	0.50
98A:						
Ade	Slight		Slight		Well suited	
98B:						
Ade	Slight		Slight		Well suited	
98D:						
Ade	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
125A:						
Selma	Slight		Slight		Poorly suited	
					Wetness	1.00
					Ponding	0.50
					Low strength	0.50
134A:						
Camden	Slight		Slight		Moderately suited	
					Low strength	0.50
134B:						
Camden	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
134C2:						
Camden	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
152A:						
Drummer	Slight		Slight		Poorly suited	
					Wetness	1.00
					Ponding	0.50
					Low strength	0.50
172A:						
Hoopeston	Slight		Slight		Moderately suited	
					Wetness	0.50
175B:						
Lamont	Slight		Slight		Moderately suited	
					Low strength	0.50
175C2:						
Lamont	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
175D2:						
Lamont	Slight		Moderate		Poorly suited	
			Slope/erodibility	0.50	Slope	1.00
					Low strength	0.50
175D3:						
Lamont	Slight		Severe		Poorly suited	
			Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
175F2:						
Lamont	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
201A:						
Gilford	Slight		Slight		Poorly suited	
					Wetness	1.00
					Ponding	0.50
224C2:						
Strawn	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
224D2:						
Strawn	Slight		Severe		Poorly suited	
			Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
224D3:						
Strawn	Slight		Severe		Poorly suited	
			Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
224F2:						
Strawn	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
227B:						
Argyle	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
227C2:						
Argyle	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
261A:						
Niota	Slight		Slight		Poorly suited	
					Ponding	1.00
					Wetness	1.00
					Low strength	0.50
268B:						
Mt. Carroll	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
268C2:						
Mt. Carroll	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
272A:						
Edgington	Slight		Slight		Poorly suited	
					Ponding	1.00
					Wetness	1.00
					Low strength	0.50
274B:						
Seaton	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
274C:						
Seaton	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
274C2:						
Seaton	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
274D2:						
Seaton	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
274D3:						
Seaton	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
274E2:						
Seaton	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
274F:						
Seaton	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
275A:						
Joy	Slight		Slight		Moderately suited	
					Low strength	0.50
					Wetness	0.50
275B:						
Joy	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Wetness	0.50
277B:						
Port Byron	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
277C:						
Port Byron	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
277C2:						
Port Byron	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
279A:						
Rozetta	Slight		Slight		Moderately suited	
					Low strength	0.50
279B:						
Rozetta	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
280B:						
Fayette	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
280C:						
Fayette	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
280C2:						
Fayette	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
280C3:						
Fayette	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
280D2:						
Fayette	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
280D3:						
Fayette	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
280F2:						
Fayette	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
280G2:						
Fayette	Very severe		Severe		Poorly suited	
	Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
403E2:						
Elizabeth	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
410C2:						
Woodbine	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
410D2:						
Woodbine	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
410D3:						
Woodbine	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
410F2:						
Woodbine	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
410G2:						
Woodbine	Very severe		Severe		Poorly suited	
	Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
411B:						
Ashdale	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
411C2:						
Ashdale	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
412B:						
Ogle	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
412C2:						
Ogle	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
412C3:						
Ogle	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
414B:						
Myrtle	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
414C2:						
Myrtle	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
416C2:						
Durand	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
416C3:						
Durand	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
417D3:						
Derinda	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
417E2:						
Derinda	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
419B:						
Flagg	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
419C2:						
Flagg	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
419D2:						
Flagg	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
419D3:						
Flagg	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
429C2:						
Palsgrove	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
505D2:						
Dunbarton	Slight		Severe		Moderately suited	
			Slope/erodibility	0.95	Slope	0.50
					Low strength	0.50
505D3:						
Dunbarton	Slight		Severe		Moderately suited	
			Slope/erodibility	0.95	Slope	0.50
					Low strength	0.50
505E2:						
Dunbarton	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
505E3:						
Dunbarton	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
505F2:						
Dunbarton	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
505G:						
Dunbarton	Very severe		Severe		Poorly suited	
	Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
506C2:						
Hitt	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
506C3:						
Hitt	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
546C2:						
Keltner	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
547C2:						
Eleroy	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
547D2:						
Eleroy	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
564B:						
Waukegan	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
564C2:						
Waukegan	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
565B:						
Tell	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
565C2:						
Tell	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
565D2:						
Tell	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
565D3:						
Tell	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
565F2:						
Tell	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
569F2:						
Medary	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
572C2:						
Loran	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
576A:						
Zwingle	Slight		Slight		Poorly suited	
					Wetness	1.00
					Low strength	0.50
576B:						
Zwingle	Slight		Moderate		Poorly suited	
			Slope/erodibility	0.50	Wetness	1.00
					Low strength	0.50
576C:						
Zwingle	Slight		Moderate		Poorly suited	
			Slope/erodibility	0.50	Wetness	1.00
					Low strength	0.50
					Slope	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
660D2:						
Coatsburg	Slight		Severe		Poorly suited	
			Slope/erodibility	0.95	Slope	1.00
					Wetness	1.00
					Low strength	0.50
660D3:						
Coatsburg	Slight		Severe		Poorly suited	
			Slope/erodibility	0.95	Slope	1.00
					Wetness	1.00
					Low strength	0.50
675A:						
Greenbush	Slight		Slight		Moderately suited	
					Low strength	0.50
675B:						
Greenbush	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
675C:						
Greenbush	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
675C2:						
Greenbush	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
689B:						
Coloma	Slight		Slight		Moderately suited	
					Sandiness	0.50
689D:						
Coloma	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
					Sandiness	0.50
689F:						
Coloma	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Sandiness	0.50
735D2:						
Casco	Slight		Severe		Moderately suited	
			Slope/erodibility	0.95	Slope	0.50
					Low strength	0.50
Rodman	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Slope	0.50
Fox	Moderate		Severe		Moderately suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
					Low strength	0.50
735E2:						
Casco	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
735E2:						
Rodman	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
Fox	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
764B:						
Coyne	Slight		Slight		Well suited	
785G:						
Lacrescent	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
798C2:						
Fayette	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
Gale	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
802B:						
Orthents	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
835G:						
Earthen dam	Slight		Slight		Well suited	
862:						
Pits	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	
865:						
Pits, gravel	Not rated		Not rated		Not rated	
905F:						
NewGlarus	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
Lamoille	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
905G:						
NewGlarus	Very severe		Severe		Poorly suited	
	Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
Lamoille	Very severe		Severe		Poorly suited	
	Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
928C2:						
NewGlarus	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
Palsgrove	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
928D2:						
NewGlarus	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
Palsgrove	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
943F2:						
Seaton	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
Timula	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
943G2:						
Seaton	Very severe		Severe		Poorly suited	
	Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
Timula	Very severe		Severe		Poorly suited	
	Slope/erodibility	0.95	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
952C2:						
Tell	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
Lamont	Slight		Moderate		Moderately suited	
			Slope/erodibility	0.50	Low strength	0.50
					Slope	0.50
952D2:						
Tell	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
Lamont	Slight		Moderate		Poorly suited	
			Slope/erodibility	0.50	Slope	1.00
					Low strength	0.50
952D3:						
Tell	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
952D3:						
Lamont	Slight		Severe		Poorly suited	
			Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
952F2:						
Tell	Severe		Severe		Poorly suited	
	Slope/erodibility	0.75	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
Lamont	Moderate		Severe		Poorly suited	
	Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	1.00
					Low strength	0.50
1076A:						
Otter	Slight		Slight		Poorly suited	
					Ponding	1.00
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
1082A:						
Millington	Slight		Slight		Poorly suited	
					Ponding	1.00
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
1107A:						
Sawmill	Slight		Slight		Poorly suited	
					Ponding	1.00
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
1239A:						
Dorchester	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
1451A:						
Lawson	Slight		Slight		Poorly suited	
					Flooding	1.00
					Low strength	0.50
					Wetness	0.50
3076A:						
Otter	Slight		Slight		Poorly suited	
					Ponding	1.00
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
3082A:						
Millington	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3107+:						
Sawmill	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	0.50
					Low strength	0.50
3107A:						
Sawmill	Slight		Slight		Poorly suited	
					Ponding	1.00
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
3333A:						
Wakeland	Slight		Slight		Poorly suited	
					Flooding	1.00
					Wetness	0.50
					Low strength	0.50
3415A:						
Orion	Slight		Slight		Poorly suited	
					Flooding	1.00
					Low strength	0.50
					Wetness	0.50
3451A:						
Lawson	Slight		Slight		Poorly suited	
					Flooding	1.00
					Low strength	0.50
					Wetness	0.50
3579A:						
Beavercreek	Slight		Slight		Poorly suited	
					Flooding	1.00
					Low strength	0.50
3646L:						
Fluvaquents	Slight		Slight		Poorly suited	
					Ponding	1.00
					Flooding	1.00
					Wetness	1.00
					Low strength	0.50
7076A:						
Otter	Slight		Slight		Poorly suited	
					Ponding	1.00
					Wetness	1.00
					Low strength	0.50
7082A:						
Millington	Slight		Slight		Poorly suited	
					Wetness	1.00
					Ponding	0.50
					Low strength	0.50
7100A:						
Palms	Very severe		Very severe		Poorly suited	
	High content of organic matter	1.00	High content of organic matter	1.00	Ponding	1.00
					Low strength	0.50

Table 11b.--Forestland Management--Continued

Map symbol and soil name	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7107+:						
Sawmill	Slight		Slight		Moderately suited	
					Wetness	0.50
					Low strength	0.50
7107A:						
Sawmill	Slight		Slight		Moderately suited	
					Wetness	0.50
					Ponding	0.50
					Low strength	0.50
7415A:						
Orion	Slight		Slight		Moderately suited	
					Low strength	0.50
					Wetness	0.50
7451A:						
Lawson	Slight		Slight		Moderately suited	
					Low strength	0.50
					Wetness	0.50
7452A:						
Riley	Slight		Slight		Moderately suited	
					Low strength	0.50
					Wetness	0.50
8077A:						
Huntsville	Slight		Slight		Poorly suited	
					Flooding	1.00
					Low strength	0.50
8239A:						
Dorchester	Slight		Slight		Poorly suited	
					Flooding	1.00
					Low strength	0.50
8239B:						
Dorchester	Slight		Moderate		Poorly suited	
			Slope/erodibility	0.50	Flooding	1.00
					Low strength	0.50

Table 11c.--Forestland Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:				
Pecatonica	Well suited		Well suited	
21C2:				
Pecatonica	Well suited		Well suited	
21C3:				
Pecatonica	Well suited		Well suited	
21D2:				
Pecatonica	Well suited		Well suited	
21D3:				
Pecatonica	Well suited		Well suited	
21F2:				
Pecatonica	Poorly suited Slope	0.50	Poorly suited Slope	0.50
29D3:				
Dubuque	Well suited		Well suited	
37A:				
Worthen	Well suited		Well suited	
37B:				
Worthen	Well suited		Well suited	
37C:				
Worthen	Well suited		Well suited	
51A:				
Muscatune	Well suited		Well suited	
51B:				
Muscatune	Well suited		Well suited	
61A:				
Atterberry	Well suited		Well suited	
61B:				
Atterberry	Well suited		Well suited	
68A:				
Sable	Well suited		Well suited	
68A+:				
Sable	Well suited		Well suited	
81A:				
Littleton	Well suited		Well suited	
81B:				
Littleton	Well suited		Well suited	

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
86A:				
Osco	Well suited		Well suited	
86B:				
Osco	Well suited		Well suited	
86C:				
Osco	Well suited		Well suited	
86C2:				
Osco	Well suited		Well suited	
86C3:				
Osco	Well suited		Well suited	
87A:				
Dickinson	Well suited		Well suited	
87B:				
Dickinson	Well suited		Well suited	
87C2:				
Dickinson	Well suited		Well suited	
88A:				
Sparta	Well suited		Well suited	
88B:				
Sparta	Well suited		Well suited	
88C:				
Sparta	Well suited		Well suited	
88E:				
Sparta	Poorly suited Slope	0.50	Poorly suited Slope	0.50
98A:				
Ade	Well suited		Well suited	
98B:				
Ade	Well suited		Well suited	
98D:				
Ade	Well suited		Well suited	
125A:				
Selma	Well suited		Well suited	
134A:				
Camden	Well suited		Well suited	
134B:				
Camden	Well suited		Well suited	
134C2:				
Camden	Well suited		Well suited	
152A:				
Drummer	Well suited		Well suited	

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
172A:				
Hoopeston	Well suited		Well suited	
175B:				
Lamont	Well suited		Well suited	
175C2:				
Lamont	Well suited		Well suited	
175D2:				
Lamont	Well suited		Well suited	
175D3:				
Lamont	Well suited		Well suited	
175F2:				
Lamont	Poorly suited Slope	0.50	Poorly suited Slope	0.50
201A:				
Gilford	Well suited		Well suited	
224C2:				
Strawn	Well suited		Well suited	
224D2:				
Strawn	Well suited		Well suited	
224D3:				
Strawn	Well suited		Well suited	
224F2:				
Strawn	Poorly suited Slope	0.50	Poorly suited Slope	0.50
227B:				
Argyle	Well suited		Well suited	
227C2:				
Argyle	Well suited		Well suited	
261A:				
Niota	Well suited		Well suited	
268B:				
Mt. Carroll	Well suited		Well suited	
268C2:				
Mt. Carroll	Well suited		Well suited	
272A:				
Edgington	Well suited		Well suited	
274B:				
Seaton	Well suited		Well suited	
274C:				
Seaton	Well suited		Well suited	

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
274C2:				
Seaton	Well suited		Well suited	
274D2:				
Seaton	Well suited		Well suited	
274D3:				
Seaton	Well suited		Well suited	
274E2:				
Seaton	Poorly suited Slope	0.50	Poorly suited Slope	0.50
274F:				
Seaton	Poorly suited Slope	0.50	Poorly suited Slope	0.50
275A:				
Joy	Well suited		Well suited	
275B:				
Joy	Well suited		Well suited	
277B:				
Port Byron	Well suited		Well suited	
277C:				
Port Byron	Well suited		Well suited	
277C2:				
Port Byron	Well suited		Well suited	
279A:				
Rozetta	Well suited		Well suited	
279B:				
Rozetta	Well suited		Well suited	
280B:				
Fayette	Well suited		Well suited	
280C:				
Fayette	Well suited		Well suited	
280C2:				
Fayette	Well suited		Well suited	
280C3:				
Fayette	Well suited		Well suited	
280D2:				
Fayette	Well suited		Well suited	
280D3:				
Fayette	Well suited		Well suited	
280F2:				
Fayette	Poorly suited Slope	0.50	Poorly suited Slope	0.50

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
280G2:				
Fayette	Unsuited		Unsuited	
	Slope	1.00	Slope	1.00
403E2:				
Elizabeth	Poorly suited		Poorly suited	
	Rock fragments	0.50	Slope	0.50
	Slope	0.50		
	Restrictive layer	0.50		
410C2:				
Woodbine	Well suited		Well suited	
410D2:				
Woodbine	Well suited		Well suited	
410D3:				
Woodbine	Well suited		Well suited	
410F2:				
Woodbine	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
410G2:				
Woodbine	Unsuited		Unsuited	
	Slope	1.00	Slope	1.00
411B:				
Ashdale	Well suited		Well suited	
411C2:				
Ashdale	Well suited		Well suited	
412B:				
Ogle	Well suited		Well suited	
412C2:				
Ogle	Well suited		Well suited	
412C3:				
Ogle	Well suited		Well suited	
414B:				
Myrtle	Well suited		Well suited	
414C2:				
Myrtle	Well suited		Well suited	
416C2:				
Durand	Well suited		Well suited	
416C3:				
Durand	Well suited		Well suited	
417D3:				
Derinda	Well suited		Well suited	
417E2:				
Derinda	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
419B:				
Flagg	Well suited		Well suited	
419C2:				
Flagg	Well suited		Well suited	
419D2:				
Flagg	Well suited		Well suited	
419D3:				
Flagg	Well suited		Well suited	
429C2:				
Palsgrove	Well suited		Well suited	
505D2:				
Dunbarton	Well suited		Well suited	
505D3:				
Dunbarton	Poorly suited		Well suited	
	Stickiness; high plasticity index	0.50		
505E2:				
Dunbarton	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
	Stickiness; high plasticity index	0.50		
505E3:				
Dunbarton	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
	Stickiness; high plasticity index	0.50		
505F2:				
Dunbarton	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
	Stickiness; high plasticity index	0.50		
505G:				
Dunbarton	Unsuited		Unsuited	
	Slope	1.00	Slope	1.00
	Stickiness; high plasticity index	0.50		
506C2:				
Hitt	Well suited		Well suited	
506C3:				
Hitt	Well suited		Well suited	
546C2:				
Keltner	Well suited		Well suited	
547C2:				
Eleroy	Well suited		Well suited	

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
547D2:				
Eleroy	Well suited		Well suited	
564B:				
Waukegan	Well suited		Well suited	
564C2:				
Waukegan	Well suited		Well suited	
565B:				
Tell	Well suited		Well suited	
565C2:				
Tell	Well suited		Well suited	
565D2:				
Tell	Well suited		Well suited	
565D3:				
Tell	Well suited		Well suited	
565F2:				
Tell	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
569F2:				
Medary	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
	Stickiness; high plasticity index	0.50		
572C2:				
Loran	Well suited		Well suited	
576A:				
Zwingle	Poorly suited		Well suited	
	Stickiness; high plasticity index	0.50		
576B:				
Zwingle	Well suited		Well suited	
576C:				
Zwingle	Well suited		Well suited	
660D2:				
Coatsburg	Well suited		Well suited	
660D3:				
Coatsburg	Poorly suited		Well suited	
	Stickiness; high plasticity index	0.50		
675A:				
Greenbush	Well suited		Well suited	
675B:				
Greenbush	Well suited		Well suited	

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
675C:				
Greenbush	Well suited		Well suited	
675C2:				
Greenbush	Well suited		Well suited	
689B:				
Coloma	Well suited		Well suited	
689D:				
Coloma	Well suited		Well suited	
689F:				
Coloma	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
735D2:				
Casco	Well suited		Well suited	
Rodman	Well suited		Well suited	
Fox	Well suited		Well suited	
735E2:				
Casco	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
Rodman	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
Fox	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
764B:				
Coyne	Well suited		Well suited	
785G:				
Lacrescent	Unsuited		Unsuited	
	Slope	1.00	Slope	1.00
	Rock fragments	0.50		
798C2:				
Fayette	Well suited		Well suited	
Gale	Well suited		Well suited	
802B:				
Orthents	Well suited		Well suited	
835G:				
Earthen dam	Not rated		Not rated	
862:				
Pits	Not rated		Not rated	
864:				
Pits, quarries	Not rated		Not rated	
865:				
Pits, gravel	Not rated		Not rated	

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
905F:				
NewGlarus	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
Lamoille	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
	Stickiness; high plasticity index	0.50		
905G:				
NewGlarus	Unsuited		Unsuited	
	Slope	1.00	Slope	1.00
Lamoille	Unsuited		Unsuited	
	Slope	1.00	Slope	1.00
	Stickiness; high plasticity index	0.50		
928C2:				
NewGlarus	Well suited		Well suited	
Palsgrove	Well suited		Well suited	
928D2:				
NewGlarus	Well suited		Well suited	
Palsgrove	Well suited		Well suited	
943F2:				
Seaton	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
Timula	Poorly suited		Poorly suited	
	Slope	0.50	Slope	0.50
943G2:				
Seaton	Unsuited		Unsuited	
	Slope	1.00	Slope	1.00
Timula	Unsuited		Unsuited	
	Slope	1.00	Slope	1.00
952C2:				
Tell	Well suited		Well suited	
Lamont	Well suited		Well suited	
952D2:				
Tell	Well suited		Well suited	
Lamont	Well suited		Well suited	
952D3:				
Tell	Well suited		Well suited	
Lamont	Well suited		Well suited	

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
952F2:				
Tell	Poorly suited Slope	0.50	Poorly suited Slope	0.50
Lamont	Poorly suited Slope	0.50	Poorly suited Slope	0.50
1076A:				
Otter	Well suited		Well suited	
1082A:				
Millington	Well suited		Well suited	
1107A:				
Sawmill	Well suited		Well suited	
1239A:				
Dorchester	Well suited		Well suited	
1451A:				
Lawson	Well suited		Well suited	
3076A:				
Otter	Well suited		Well suited	
3082A:				
Millington	Well suited		Well suited	
3107+:				
Sawmill	Well suited		Well suited	
3107A:				
Sawmill	Well suited		Well suited	
3333A:				
Wakeland	Well suited		Well suited	
3415A:				
Orion	Well suited		Well suited	
3451A:				
Lawson	Well suited		Well suited	
3579A:				
Beavercreek	Well suited		Well suited	
3646L:				
Fluvaquents	Unsuited Wetness	0.75	Unsuited Wetness	1.00
7076A:				
Otter	Well suited		Well suited	
7082A:				
Millington	Well suited		Well suited	
7100A:				
Palms	Well suited		Well suited	

Table 11c.--Forestland Management--Continued

Map symbol and soil name	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (deep)	
	Rating class and limiting features	Value	Rating class and limiting features	Value
7107+:				
Sawmill	Well suited		Well suited	
7107A:				
Sawmill	Well suited		Well suited	
7415A:				
Orion	Well suited		Well suited	
7451A:				
Lawson	Well suited		Well suited	
7452A:				
Riley	Well suited		Well suited	
8077A:				
Huntsville	Well suited		Well suited	
8239A:				
Dorchester	Well suited		Well suited	
8239B:				
Dorchester	Well suited		Well suited	

Table 11d.--Forestland Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
21B:		
Pecatonica	Low	
21C2:		
Pecatonica	Low	
21C3:		
Pecatonica	Low	
21D2:		
Pecatonica	Low	
21D3:		
Pecatonica	Low	
21F2:		
Pecatonica	Low	
29D3:		
Dubuque	Low	
37A:		
Worthen	Low	
37B:		
Worthen	Low	
37C:		
Worthen	Low	
51A:		
Muscatune	Low	
51B:		
Muscatune	Low	
61A:		
Atterberry	High	
	Wetness	1.00
61B:		
Atterberry	High	
	Wetness	1.00
68A:		
Sable	High	
	Wetness	1.00
68A+:		
Sable	High	
	Wetness	1.00

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
81A:		
Littleton	Low	
81B:		
Littleton	Low	
86A:		
Osco	Low	
86B:		
Osco	Low	
86C:		
Osco	Low	
86C2:		
Osco	Low	
86C3:		
Osco	Low	
87A:		
Dickinson	Low	
87B:		
Dickinson	Low	
87C2:		
Dickinson	Low	
88A:		
Sparta	Low	
88B:		
Sparta	Low	
88C:		
Sparta	Low	
88E:		
Sparta	Low	
98A:		
Ade	Low	
98B:		
Ade	Low	
98D:		
Ade	Low	
125A:		
Selma	High Wetness	1.00
134A:		
Camden	Low	
134B:		
Camden	Low	

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
134C2:		
Camden	Low	
152A:		
Drummer	High	
	Wetness	1.00
172A:		
Hoopeston	Low	
175B:		
Lamont	Low	
175C2:		
Lamont	Low	
175D2:		
Lamont	Low	
175D3:		
Lamont	Low	
175F2:		
Lamont	Low	
201A:		
Gilford	High	
	Wetness	1.00
224C2:		
Strawn	Low	
224D2:		
Strawn	Low	
224D3:		
Strawn	Low	
224F2:		
Strawn	Low	
227B:		
Argyle	Low	
227C2:		
Argyle	Low	
261A:		
Niota	High	
	Wetness	1.00
268B:		
Mt. Carroll	Low	
268C2:		
Mt. Carroll	Low	
272A:		
Edgington	High	
	Wetness	1.00

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
274B:		
Seaton	Low	
274C:		
Seaton	Low	
274C2:		
Seaton	Low	
274D2:		
Seaton	Low	
274D3:		
Seaton	Low	
274E2:		
Seaton	Low	
274F:		
Seaton	Low	
275A:		
Joy	Low	
275B:		
Joy	Low	
277B:		
Port Byron	Low	
277C:		
Port Byron	Low	
277C2:		
Port Byron	Low	
279A:		
Rozetta	Low	
279B:		
Rozetta	Low	
280B:		
Fayette	Low	
280C:		
Fayette	Low	
280C2:		
Fayette	Low	
280C3:		
Fayette	Low	
280D2:		
Fayette	Low	
280D3:		
Fayette	Low	

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
280F2:		
Fayette	Low	
280G2:		
Fayette	Low	
403E2:		
Elizabeth	Moderate Lime	0.50
410C2:		
Woodbine	Low	
410D2:		
Woodbine	Low	
410D3:		
Woodbine	Low	
410F2:		
Woodbine	Low	
410G2:		
Woodbine	Low	
411B:		
Ashdale	Low	
411C2:		
Ashdale	Low	
412B:		
Ogle	Low	
412C2:		
Ogle	Low	
412C3:		
Ogle	Low	
414B:		
Myrtle	Low	
414C2:		
Myrtle	Low	
416C2:		
Durand	Low	
416C3:		
Durand	Low	
417D3:		
Derinda	Low	
417E2:		
Derinda	Low	
419B:		
Flagg	Low	

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
419C2:		
Flagg	Low	
419D2:		
Flagg	Low	
419D3:		
Flagg	Low	
429C2:		
Palsgrove	Low	
505D2:		
Dunbarton	Low	
505D3:		
Dunbarton	Low	
505E2:		
Dunbarton	Low	
505E3:		
Dunbarton	Low	
505F2:		
Dunbarton	Low	
505G:		
Dunbarton	Low	
506C2:		
Hitt	Low	
506C3:		
Hitt	Low	
546C2:		
Keltner	Low	
547C2:		
Eleroy	Low	
547D2:		
Eleroy	Low	
564B:		
Waukegan	Low	
564C2:		
Waukegan	Low	
565B:		
Tell	Low	
565C2:		
Tell	Low	
565D2:		
Tell	Low	

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
565D3:		
Tell	Low	
565F2:		
Tell	Low	
569F2:		
Medary	Low	
572C2:		
Loran	Low	
576A:		
Zwingle	High	
	Wetness	1.00
576B:		
Zwingle	High	
	Wetness	1.00
576C:		
Zwingle	High	
	Wetness	1.00
660D2:		
Coatsburg	High	
	Wetness	1.00
660D3:		
Coatsburg	High	
	Wetness	1.00
675A:		
Greenbush	Low	
675B:		
Greenbush	Low	
675C:		
Greenbush	Low	
675C2:		
Greenbush	Low	
689B:		
Coloma	Low	
689D:		
Coloma	Low	
689F:		
Coloma	Low	
735D2:		
Casco	Low	
Rodman	Moderate	
	Lime	0.50
Fox	Low	

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
735E2:		
Casco	Low	
Rodman	Moderate Lime	0.50
Fox	Low	
764B:		
Coyne	Low	
785G:		
Lacrescent	Low	
798C2:		
Fayette	Low	
Gale	Low	
802B:		
Orthents	Low	
835G:		
Earthen dam	Not rated	
862:		
Pits, sand	Not rated	
864:		
Pits, quarries	Not rated	
865:		
Pits, gravel	Not rated	
905F:		
NewGlarus	Low	
Lamoille	Low	
905G:		
NewGlarus	Low	
Lamoille	Low	
928C2:		
NewGlarus	Low	
Palsgrove	Low	
928D2:		
NewGlarus	Low	
Palsgrove	Low	
943F2:		
Seaton	Low	
Timula	Low	

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
943G2:		
Seaton	Low	
Timula	Low	
952C2:		
Tell	Low	
Lamont	Low	
952D2:		
Tell	Low	
Lamont	Low	
952D3:		
Tell	Low	
Lamont	Low	
952F2:		
Tell	Low	
Lamont	Low	
1076A:		
Otter	High	
	Wetness	1.00
1082A:		
Millington	High	
	Wetness	1.00
	Soil reaction	0.50
1107A:		
Sawmill	High	
	Wetness	1.00
1239A:		
Dorchester	High	
	Wetness	1.00
	Lime	0.50
1451A:		
Lawson	Low	
3076A:		
Otter	High	
	Wetness	1.00
3082A:		
Millington	High	
	Wetness	1.00
	Soil reaction	0.50
3107+:		
Sawmill	High	
	Wetness	1.00

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
3107A:		
Sawmill	High	
	Wetness	1.00
3333A:		
Wakeland	High	
	Wetness	1.00
3415A:		
Orion	Low	
3451A:		
Lawson	Low	
3579A:		
Beavercreek	Low	
3646L:		
Fluvaquents	High	
	Wetness	1.00
7076A:		
Otter	High	
	Wetness	1.00
7082A:		
Millington	High	
	Wetness	1.00
	Lime	0.50
	Soil reaction	0.50
7100A:		
Palms	High	
	Wetness	1.00
	Soil reaction	1.00
7107+:		
Sawmill	High	
	Wetness	1.00
7107A:		
Sawmill	High	
	Wetness	1.00
7415A:		
Orion	Low	
7451A:		
Lawson	Low	
7452A:		
Riley	High	
	Wetness	1.00
8077A:		
Huntsville	Low	
8239A:		
Dorchester	Moderate	
	Lime	0.50

Table 11d.--Forestland Management--Continued

Map symbol and soil name	Potential for seedling mortality	
	Rating class and limiting features	Value
8239B:		
Dorchester	Moderate	
	Lime	0.50

Table 12a.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Not limited		Not limited		Somewhat limited Slope	0.28
21C2:						
Pecatonica	Not limited		Not limited		Very limited Slope	1.00
21C3:						
Pecatonica	Not limited		Not limited		Very limited Slope	1.00
21D2:						
Pecatonica	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
21D3:						
Pecatonica	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
21F2:						
Pecatonica	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
29D3:						
Dubuque	Somewhat limited Slope Restricted permeability	0.96 0.96	Somewhat limited Slope Restricted permeability	0.96 0.96	Very limited Slope Restricted permeability Depth to bedrock	1.00 0.96 0.80
37A:						
Worthen	Not limited		Not limited		Not limited	
37B:						
Worthen	Not limited		Not limited		Somewhat limited Slope	0.28
37C:						
Worthen	Not limited		Not limited		Very limited Slope	1.00
51A:						
Muscatune	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone	0.98
51B:						
Muscatune	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Slope	0.98 0.28

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
61A:						
Atterberry	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.94	Very limited Depth to saturated zone	1.00
61B:						
Atterberry	Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.94	Very limited Depth to saturated zone Slope	1.00 0.28
68A:						
Sable	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
68A+:						
Sable	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
81A:						
Littleton	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone	0.98
81B:						
Littleton	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Slope	0.98 0.28
86A:						
Osco	Not limited		Not limited		Not limited	
86B:						
Osco	Not limited		Not limited		Somewhat limited Slope	0.28
86C:						
Osco	Not limited		Not limited		Very limited Slope	1.00
86C2:						
Osco	Not limited		Not limited		Very limited Slope	1.00
86C3:						
Osco	Not limited		Not limited		Very limited Slope	1.00
87A:						
Dickinson	Not limited		Not limited		Not limited	
87B:						
Dickinson	Not limited		Not limited		Somewhat limited Slope	0.28

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
87C2:						
Dickinson	Not limited		Not limited		Very limited	
					Slope	1.00
88A:						
Sparta	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
88B:						
Sparta	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
					Slope	0.28
88C:						
Sparta	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.95	Too sandy	0.95	Slope	1.00
	Slope	0.04	Slope	0.04	Too sandy	0.95
88E:						
Sparta	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too sandy	0.95	Too sandy	0.95	Too sandy	0.95
98A:						
Ade	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.68	Too sandy	0.68	Too sandy	0.68
98B:						
Ade	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.50	Too sandy	0.50	Slope	0.72
					Too sandy	0.50
98D:						
Ade	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.68	Too sandy	0.68	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	0.68
125A:						
Selma	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
134A:						
Camden	Not limited		Not limited		Not limited	
134B:						
Camden	Not limited		Not limited		Somewhat limited	
					Slope	0.28
134C2:						
Camden	Not limited		Not limited		Very limited	
					Slope	1.00
152A:						
Drummer	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
172A:						
Hoopeston	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone	0.98
175B:						
Lamont	Not limited		Not limited		Somewhat limited Slope	0.28
175C2:						
Lamont	Not limited		Not limited		Very limited Slope	1.00
175D2:						
Lamont	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
175D3:						
Lamont	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
175F2:						
Lamont	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
201A:						
Gilford	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00	Very limited Depth to saturated zone Ponding	1.00 1.00
224C2:						
Strawn	Not limited		Not limited		Very limited Slope	1.00
224D2:						
Strawn	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
224D3:						
Strawn	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
224F2:						
Strawn	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
227B:						
Argyle	Not limited		Not limited		Somewhat limited Slope	0.28
227C2:						
Argyle	Not limited		Not limited		Very limited Slope	1.00

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
261A:						
Niota	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
268B:						
Mt. Carroll	Not limited		Not limited		Somewhat limited	
					Slope	0.28
268C2:						
Mt. Carroll	Not limited		Not limited		Very limited	
					Slope	1.00
272A:						
Edgington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
274B:						
Seaton	Not limited		Not limited		Somewhat limited	
					Slope	0.28
274C:						
Seaton	Not limited		Not limited		Very limited	
					Slope	1.00
274C2:						
Seaton	Not limited		Not limited		Very limited	
					Slope	1.00
274D2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
274D3:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
274E2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
274F:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
275A:						
Joy	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	0.75	Depth to saturated zone	0.98

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
275B:						
Joy	Somewhat limited Depth to saturated zone	0.98	Somewhat limited Depth to saturated zone	0.75	Somewhat limited Depth to saturated zone Slope	0.98 0.28
277B:						
Port Byron	Not limited		Not limited		Somewhat limited Slope	0.28
277C:						
Port Byron	Not limited		Not limited		Very limited Slope	1.00
277C2:						
Port Byron	Not limited		Not limited		Very limited Slope	1.00
279A:						
Rozetta	Not limited		Not limited		Not limited	
279B:						
Rozetta	Not limited		Not limited		Somewhat limited Slope	0.28
280B:						
Fayette	Not limited		Not limited		Somewhat limited Slope	0.28
280C:						
Fayette	Not limited		Not limited		Very limited Slope	1.00
280C2:						
Fayette	Not limited		Not limited		Very limited Slope	1.00
280C3:						
Fayette	Not limited		Not limited		Very limited Slope	1.00
280D2:						
Fayette	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
280D3:						
Fayette	Somewhat limited Slope	0.96	Somewhat limited Slope	0.96	Very limited Slope	1.00
280F2:						
Fayette	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
280G2:						
Fayette	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
403E2:						
Elizabeth	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
					Gravel content	0.39
410C2:						
Woodbine	Not limited		Not limited		Very limited	
					Slope	1.00
410D2:						
Woodbine	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
410D3:						
Woodbine	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
410F2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
410G2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
411B:						
Ashdale	Not limited		Not limited		Somewhat limited	
					Slope	0.28
411C2:						
Ashdale	Not limited		Not limited		Very limited	
					Slope	1.00
412B:						
Ogle	Not limited		Not limited		Somewhat limited	
					Slope	0.28
412C2:						
Ogle	Not limited		Not limited		Very limited	
					Slope	1.00
412C3:						
Ogle	Not limited		Not limited		Very limited	
					Slope	1.00
414B:						
Myrtle	Not limited		Not limited		Somewhat limited	
					Slope	0.28
414C2:						
Myrtle	Not limited		Not limited		Very limited	
					Slope	1.00
416C2:						
Durand	Not limited		Not limited		Very limited	
					Slope	1.00

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
416C3:						
Durand	Not limited		Not limited		Very limited	
					Slope	1.00
417D3:						
Derinda	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
					Depth to bedrock	0.42
417E2:						
Derinda	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
					Depth to bedrock	0.42
419B:						
Flagg	Not limited		Not limited		Somewhat limited	
					Slope	0.28
419C2:						
Flagg	Not limited		Not limited		Very limited	
					Slope	1.00
419D2:						
Flagg	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
419D3:						
Flagg	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
429C2:						
Palsgrove	Not limited		Not limited		Very limited	
					Slope	1.00
505D2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Restricted permeability	0.22	Restricted permeability	0.22	Depth to bedrock	1.00
					Gravel content	0.70
	Slope	0.04	Slope	0.04	Restricted permeability	0.22
505D3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Restricted permeability	0.22	Restricted permeability	0.22	Depth to bedrock	1.00
					Gravel content	0.70
	Slope	0.04	Slope	0.04	Restricted permeability	0.22
505E2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Restricted permeability	0.22	Restricted permeability	0.22	Gravel content	0.70
					Restricted permeability	0.22

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
505E3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Restricted permeability	0.22	Restricted permeability	0.22	Gravel content	0.70
					Restricted permeability	0.22
505F2:						
Dunbarton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Restricted permeability	0.22	Restricted permeability	0.22	Gravel content	0.70
					Restricted permeability	0.22
505G:						
Dunbarton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Restricted permeability	0.22	Restricted permeability	0.22	Gravel content	0.70
					Restricted permeability	0.22
506C2:						
Hitt	Somewhat limited		Somewhat limited		Very limited	
	Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
					Restricted permeability	0.96
506C3:						
Hitt	Somewhat limited		Somewhat limited		Very limited	
	Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
					Restricted permeability	0.96
546C2:						
Keltner	Somewhat limited		Somewhat limited		Very limited	
	Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
					Restricted permeability	0.96
547C2:						
Eleroy	Not limited		Not limited		Very limited	
					Slope	1.00
547D2:						
Eleroy	Very limited		Very limited		Very limited	
	Restricted permeability	1.00	Restricted permeability	1.00	Slope	1.00
	Slope	0.96	Slope	0.96	Restricted permeability	1.00
564B:						
Waukegan	Not limited		Not limited		Somewhat limited	
					Slope	0.28
564C2:						
Waukegan	Not limited		Not limited		Very limited	
					Slope	1.00

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
565B:						
Tell	Not limited		Not limited		Somewhat limited	
					Slope	0.28
565C2:						
Tell	Not limited		Not limited		Very limited	
					Slope	1.00
565D2:						
Tell	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
565D3:						
Tell	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
565F2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
569F2:						
Medary	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
572C2:						
Loran	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	0.39	Depth to saturated zone	0.19	Slope	1.00
					Depth to saturated zone	0.39
576A:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
576B:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
					Slope	0.28
576C:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
					Slope	1.00
660D2:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Restricted permeability	1.00	Slope	1.00
	Slope	0.96	Slope	0.96	Restricted permeability	1.00

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
660D3:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Restricted permeability	1.00	Slope	1.00
	Slope	0.96	Slope	0.96	Restricted permeability	1.00
675A:						
Greenbush	Not limited		Not limited		Not limited	
675B:						
Greenbush	Not limited		Not limited		Somewhat limited	
					Slope	0.28
675C:						
Greenbush	Not limited		Not limited		Very limited	
					Slope	1.00
675C2:						
Greenbush	Not limited		Not limited		Very limited	
					Slope	1.00
689B:						
Coloma	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
					Slope	0.72
689D:						
Coloma	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	0.37	Slope	0.37	Too sandy	1.00
689F:						
Coloma	Very limited		Very limited		Very limited	
	Slope	1.00	Too sandy	1.00	Slope	1.00
	Too sandy	1.00	Slope	1.00	Too sandy	1.00
735D2:						
Casco	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.16	Slope	0.16	Slope	1.00
Rodman	Somewhat limited		Somewhat limited		Very limited	
	Gravel content	0.17	Gravel content	0.17	Slope	1.00
	Slope	0.16	Slope	0.16	Gravel content	1.00
Fox	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.16	Slope	0.16	Slope	1.00
735E2:						
Casco	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Rodman	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Gravel content	0.17	Gravel content	0.17	Gravel content	1.00
Fox	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
764B:						
Coyne	Not limited		Not limited		Somewhat limited	
					Slope	0.28
785G:						
Lacrescent	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Content of large stones	0.88
					Gravel content	0.82
798C2:						
Fayette	Not limited		Not limited		Very limited	
					Slope	1.00
Gale	Not limited		Not limited		Very limited	
					Slope	1.00
					Depth to bedrock	0.71
802B:						
Orthents	Somewhat limited		Somewhat limited		Somewhat limited	
	Restricted permeability	0.21	Restricted permeability	0.21	Slope	0.50
					Restricted permeability	0.21
835G:						
Earthen dam	Not rated		Not rated		Not rated	
862:						
Pits, sand	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	
865:						
Pits, gravel	Not rated		Not rated		Not rated	
905F:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
					Depth to bedrock	0.42
Lamoille	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.43	Restricted permeability	0.43	Restricted permeability	0.43
905G:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
					Depth to bedrock	0.42
Lamoille	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Restricted permeability	0.43	Restricted permeability	0.43	Restricted permeability	0.43

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
928C2:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
					Restricted permeability	0.96
					Depth to bedrock	0.42
Palsgrove	Not limited		Not limited		Very limited	
					Slope	1.00
928D2:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
					Depth to bedrock	0.42
Palsgrove	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
943F2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Timula	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
943G2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Timula	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
952C2:						
Tell	Not limited		Not limited		Very limited	
					Slope	1.00
Lamont	Not limited		Not limited		Very limited	
					Slope	1.00
952D2:						
Tell	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
Lamont	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
952D3:						
Tell	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
Lamont	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
952F2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Ponding	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
1082A:						
Millington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Ponding	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
1107A:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Ponding	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
1239A:						
Dorchester	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40	Flooding	1.00
1451A:						
Lawson	Very limited		Somewhat limited		Very limited	
	Flooding	1.00	Depth to saturated zone	0.75	Flooding	1.00
	Depth to saturated zone	0.98	Flooding	0.40	Depth to saturated zone	0.98
3076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Ponding	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
3082A:						
Millington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40	Flooding	1.00
3107+:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40	Flooding	1.00
3107A:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3333A:						
Wakeland	Very limited		Somewhat limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	0.94	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.40	Flooding	1.00
3415A:						
Orion	Very limited		Somewhat limited		Very limited	
	Flooding	1.00	Depth to saturated zone	0.75	Flooding	1.00
	Depth to saturated zone	0.98	Flooding	0.40	Depth to saturated zone	0.98
3451A:						
Lawson	Very limited		Somewhat limited		Very limited	
	Flooding	1.00	Depth to saturated zone	0.75	Flooding	1.00
	Depth to saturated zone	0.98	Flooding	0.40	Depth to saturated zone	0.98
3579A:						
Beavercreek	Very limited		Somewhat limited		Very limited	
	Flooding	1.00	Flooding	0.40	Flooding	1.00
3646L:						
Fluvaquents	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
7076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00				
7082A:						
Millington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00				
7100A:						
Palms	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
7107+:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00				

Table 12a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7107A:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00				
7415A:						
Orion	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.75	Depth to saturated zone	0.98
	Depth to saturated zone	0.98				
7451A:						
Lawson	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.75	Depth to saturated zone	0.98
	Depth to saturated zone	0.98				
7452A:						
Riley	Very limited		Somewhat limited		Somewhat limited	
	Flooding	1.00	Depth to saturated zone	0.78	Depth to saturated zone	0.99
	Depth to saturated zone	0.99				
8077A:						
Huntsville	Very limited		Not limited		Somewhat limited	
	Flooding	1.00			Flooding	0.60
8239A:						
Dorchester	Very limited		Not limited		Somewhat limited	
	Flooding	1.00			Flooding	0.60
8239B:						
Dorchester	Very limited		Not limited		Somewhat limited	
	Flooding	1.00			Flooding	0.60
					Slope	0.28

Table 12b.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Not limited		Not limited		Not limited	
21C2:						
Pecatonica	Not limited		Not limited		Not limited	
21C3:						
Pecatonica	Not limited		Not limited		Not limited	
21D2:						
Pecatonica	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
21D3:						
Pecatonica	Not limited		Not limited		Somewhat limited	
					Slope	0.96
21F2:						
Pecatonica	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.02		
29D3:						
Dubuque	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
					Depth to bedrock	0.80
37A:						
Worthen	Not limited		Not limited		Not limited	
37B:						
Worthen	Not limited		Not limited		Not limited	
37C:						
Worthen	Not limited		Not limited		Not limited	
51A:						
Muscatune	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
51B:						
Muscatune	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
61A:						
Atterberry	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.86	Depth to saturated zone	0.86	Depth to saturated zone	0.94
61B:						
Atterberry	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.86	Depth to saturated zone	0.86	Depth to saturated zone	0.94

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
68A:						
Sable	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
68A+:						
Sable	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
81A:						
Littleton	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
81B:						
Littleton	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
86A:						
Osco	Not limited		Not limited		Not limited	
86B:						
Osco	Not limited		Not limited		Not limited	
86C:						
Osco	Not limited		Not limited		Not limited	
86C2:						
Osco	Not limited		Not limited		Not limited	
86C3:						
Osco	Not limited		Not limited		Not limited	
87A:						
Dickinson	Not limited		Not limited		Not limited	
87B:						
Dickinson	Not limited		Not limited		Not limited	
87C2:						
Dickinson	Not limited		Not limited		Not limited	
88A:						
Sparta	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.95	Too sandy	0.95	Droughty	0.08
88B:						
Sparta	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.95	Too sandy	0.95	Droughty	0.08
88C:						
Sparta	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.95	Too sandy	0.95	Droughty	0.07
					Slope	0.04

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
88E:						
Sparta	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.95	Too sandy	0.95	Slope	1.00
	Slope	0.02			Droughty	0.11
98A:						
Ade	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.68	Too sandy	0.68	Droughty	0.15
98B:						
Ade	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.50	Too sandy	0.50	Droughty	0.34
98D:						
Ade	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.68	Too sandy	0.68	Slope	0.37
					Droughty	0.15
125A:						
Selma	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
134A:						
Camden	Not limited		Not limited		Not limited	
134B:						
Camden	Not limited		Not limited		Not limited	
134C2:						
Camden	Not limited		Not limited		Not limited	
152A:						
Drummer	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
172A:						
Hoopeston	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
175B:						
Lamont	Not limited		Not limited		Not limited	
175C2:						
Lamont	Not limited		Not limited		Not limited	
175D2:						
Lamont	Not limited		Not limited		Somewhat limited	
					Slope	0.96
175D3:						
Lamont	Not limited		Not limited		Somewhat limited	
					Slope	0.96
175F2:						
Lamont	Very limited		Somewhat limited		Very limited	
	Slope	1.00	Slope	0.02	Slope	1.00

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
201A:						
Gilford	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
224C2:						
Strawn	Not limited		Not limited		Not limited	
224D2:						
Strawn	Not limited		Not limited		Somewhat limited Slope	 0.96
224D3:						
Strawn	Not limited		Not limited		Somewhat limited Slope	 0.96
224F2:						
Strawn	Very limited Slope	 1.00	Somewhat limited Slope	 0.02	Very limited Slope	 1.00
227B:						
Argyle	Not limited		Not limited		Not limited	
227C2:						
Argyle	Not limited		Not limited		Not limited	
261A:						
Niota	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
268B:						
Mt. Carroll	Not limited		Not limited		Not limited	
268C2:						
Mt. Carroll	Not limited		Not limited		Not limited	
272A:						
Edgington	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
274B:						
Seaton	Not limited		Not limited		Not limited	
274C:						
Seaton	Not limited		Not limited		Not limited	
274C2:						
Seaton	Not limited		Not limited		Not limited	
274D2:						
Seaton	Very limited Water erosion	 1.00	Very limited Water erosion	 1.00	Somewhat limited Slope	 0.96
274D3:						
Seaton	Very limited Water erosion	 1.00	Very limited Water erosion	 1.00	Somewhat limited Slope	 0.96

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
274E2:						
Seaton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.76				
274F:						
Seaton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.02		
275A:						
Joy	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
275B:						
Joy	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Depth to saturated zone	0.75
277B:						
Port Byron	Not limited		Not limited		Not limited	
277C:						
Port Byron	Not limited		Not limited		Not limited	
277C2:						
Port Byron	Not limited		Not limited		Not limited	
279A:						
Rozetta	Not limited		Not limited		Not limited	
279B:						
Rozetta	Not limited		Not limited		Not limited	
280B:						
Fayette	Not limited		Not limited		Not limited	
280C:						
Fayette	Not limited		Not limited		Not limited	
280C2:						
Fayette	Not limited		Not limited		Not limited	
280C3:						
Fayette	Not limited		Not limited		Not limited	
280D2:						
Fayette	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
280D3:						
Fayette	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
280F2:						
Fayette	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.02		

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
280G2:						
Fayette	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Water erosion	1.00	Slope	1.00		
403E2:						
Elizabeth	Somewhat limited		Not limited		Very limited	
	Slope	0.95			Depth to bedrock	1.00
					Slope	1.00
					Droughty	0.99
410C2:						
Woodbine	Not limited		Not limited		Not limited	
410D2:						
Woodbine	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
410D3:						
Woodbine	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
410F2:						
Woodbine	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.02		
410G2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Water erosion	1.00	Slope	1.00		
411B:						
Ashdale	Not limited		Not limited		Not limited	
411C2:						
Ashdale	Not limited		Not limited		Not limited	
412B:						
Ogle	Not limited		Not limited		Not limited	
412C2:						
Ogle	Not limited		Not limited		Not limited	
412C3:						
Ogle	Not limited		Not limited		Not limited	
414B:						
Myrtle	Not limited		Not limited		Not limited	
414C2:						
Myrtle	Not limited		Not limited		Not limited	
416C2:						
Durand	Not limited		Not limited		Not limited	
416C3:						
Durand	Not limited		Not limited		Not limited	

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
417D3:						
Derinda	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
					Depth to bedrock	0.42
417E2:						
Derinda	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.76			Depth to bedrock	0.42
419B:						
Flagg	Not limited		Not limited		Not limited	
419C2:						
Flagg	Not limited		Not limited		Not limited	
419D2:						
Flagg	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
419D3:						
Flagg	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
429C2:						
Palsgrove	Not limited		Not limited		Not limited	
505D2:						
Dunbarton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	1.00
					Droughty	0.30
					Slope	0.04
505D3:						
Dunbarton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	1.00
					Droughty	0.86
					Slope	0.04
505E2:						
Dunbarton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	1.00
	Slope	0.02			Slope	1.00
					Droughty	0.68
505E3:						
Dunbarton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	1.00
	Slope	0.02			Slope	1.00
					Droughty	0.86
505F2:						
Dunbarton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	0.06	Slope	1.00
					Droughty	0.66
505G:						
Dunbarton	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Depth to bedrock	1.00
	Water erosion	1.00	Slope	1.00	Slope	1.00
					Droughty	0.77

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
506C2:						
Hitt	Not limited		Not limited		Not limited	
506C3:						
Hitt	Not limited		Not limited		Not limited	
546C2:						
Keltner	Not limited		Not limited		Not limited	
547C2:						
Eleroy	Not limited		Not limited		Not limited	
547D2:						
Eleroy	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
564B:						
Waukegan	Not limited		Not limited		Not limited	
564C2:						
Waukegan	Not limited		Not limited		Not limited	
565B:						
Tell	Not limited		Not limited		Not limited	
565C2:						
Tell	Not limited		Not limited		Not limited	
565D2:						
Tell	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
565D3:						
Tell	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
565F2:						
Tell	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.02		
569F2:						
Medary	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.22		
572C2:						
Loran	Not limited		Not limited		Somewhat limited	
					Depth to saturated zone	0.19
576A:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
576B:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
576C:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
660D2:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
					Slope	0.96
660D3:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
					Slope	0.96
675A:						
Greenbush	Not limited		Not limited		Not limited	
675B:						
Greenbush	Not limited		Not limited		Not limited	
675C:						
Greenbush	Not limited		Not limited		Not limited	
675C2:						
Greenbush	Not limited		Not limited		Not limited	
689B:						
Coloma	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
					Droughty	0.49
689D:						
Coloma	Very limited		Very limited		Somewhat limited	
	Too sandy	1.00	Too sandy	1.00	Droughty	0.58
					Too sandy	0.50
					Slope	0.37
689F:						
Coloma	Very limited		Very limited		Very limited	
	Too sandy	1.00	Too sandy	1.00	Slope	1.00
	Slope	1.00			Droughty	0.58
					Too sandy	0.50
735D2:						
Casco	Not limited		Not limited		Somewhat limited	
					Droughty	0.23
					Slope	0.16
Rodman	Not limited		Not limited		Very limited	
					Droughty	1.00
					Gravel content	0.17
					Slope	0.16
Fox	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.16

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
735E2:						
Casco	Somewhat limited		Not limited		Very limited	
	Slope	0.02			Slope	1.00
					Droughty	0.45
Rodman	Somewhat limited		Not limited		Very limited	
	Slope	0.02			Slope	1.00
					Droughty	1.00
					Gravel content	0.17
Fox	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	0.02				
764B:						
Coyne	Not limited		Not limited		Not limited	
785G:						
Lacrescent	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
					Content of large stones	0.88
798C2:						
Fayette	Not limited		Not limited		Not limited	
Gale	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.71
802B:						
Orthents	Not limited		Not limited		Not limited	
835G:						
Earthen dam	Not rated		Not rated		Not rated	
862:						
Pits, sand	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	
865:						
Pits, gravel	Not rated		Not rated		Not rated	
905F:						
NewGlarus	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.02	Depth to bedrock	0.42
Lamoille	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.02		
905G:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Water erosion	1.00	Slope	1.00	Depth to bedrock	0.42
Lamoille	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Water erosion	1.00	Slope	1.00		

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
928C2:						
NewGlarus	Not limited		Not limited		Somewhat limited	
					Depth to bedrock	0.42
Palsgrove	Not limited		Not limited		Not limited	
928D2:						
NewGlarus	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
					Depth to bedrock	0.42
Palsgrove	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
943F2:						
Seaton	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.04		
Timula	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.04		
943G2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Water erosion	1.00	Slope	1.00		
Timula	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Water erosion	1.00	Slope	1.00		
952C2:						
Tell	Not limited		Not limited		Not limited	
Lamont	Not limited		Not limited		Not limited	
952D2:						
Tell	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
Lamont	Not limited		Not limited		Somewhat limited	
					Slope	0.96
952D3:						
Tell	Very limited		Very limited		Somewhat limited	
	Water erosion	1.00	Water erosion	1.00	Slope	0.96
Lamont	Not limited		Not limited		Somewhat limited	
					Slope	0.96
952F2:						
Tell	Very limited		Very limited		Very limited	
	Water erosion	1.00	Water erosion	1.00	Slope	1.00
	Slope	1.00	Slope	0.02		
Lamont	Very limited		Somewhat limited		Very limited	
	Slope	1.00	Slope	0.02	Slope	1.00

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Flooding	0.40	Ponding	1.00
1082A:						
Millington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Flooding	0.40	Ponding	1.00
1107A:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Flooding	0.40	Ponding	1.00
1239A:						
Dorchester	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
1451A:						
Lawson	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.75
3076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	0.40	Flooding	0.40	Ponding	1.00
3082A:						
Millington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
3107+:						
Sawmill	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
3107A:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3333A:						
Wakeland	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	0.86	Depth to saturated zone	0.86	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.94
3415A:						
Orion	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.75
3451A:						
Lawson	Somewhat limited		Somewhat limited		Very limited	
	Depth to saturated zone	0.44	Depth to saturated zone	0.44	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.75
3579A:						
Beavercreek	Somewhat limited		Somewhat limited		Very limited	
	Flooding	0.40	Flooding	0.40	Flooding	1.00
3646L:						
Fluvaquents	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00	Flooding	1.00
	Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
7076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
7082A:						
Millington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
7100A:						
Palms	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Content of organic matter	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00		
7107+:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
7107A:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 12b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7415A:						
Orion	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
7451A:						
Lawson	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.44	Somewhat limited Depth to saturated zone	0.75
7452A:						
Riley	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.50	Somewhat limited Depth to saturated zone	0.78
8077A:						
Huntsville	Not limited		Not limited		Somewhat limited Flooding	0.60
8239A:						
Dorchester	Not limited		Not limited		Somewhat limited Flooding	0.60
8239B:						
Dorchester	Not limited		Not limited		Somewhat limited Flooding	0.60

Table 13.--Wildlife Habitat

(See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable)

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
21B:										
Pecatonica	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
21C2:										
Pecatonica	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
21C3:										
Pecatonica	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
21D2:										
Pecatonica	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
21D3:										
Pecatonica	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
21F2:										
Pecatonica	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
29D3:										
Dubuque	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
37A:										
Worthen	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
37B:										
Worthen	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
37C:										
Worthen	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
51A:										
Muscatune	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
51B:										
Muscatune	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
61A:										
Atterberry	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
61B:										
Atterberry	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
68A:										
Sable	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
68A+:										
Sable	Fair	Fair	Good	Fair	Fair	Good	Good	Fair	Fair	Good.
81A:										
Littleton	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
81B:										
Littleton	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
86A:										
Osco	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
86B:										
Osco	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
86C:										
Osco	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
86C2:										
Osco	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
86C3:										
Osco	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
87A:										
Dickinson	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
87B:										
Dickinson	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
87C2:										
Dickinson	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Poor.
88A:										
Sparta	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
88B:										
Sparta	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
88C:										
Sparta	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
88E:										
Sparta	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
98A:										
Ade	Poor	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
98B:										
Ade	Poor	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
98D:										
Ade	Poor	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
125A:										
Selma	Fair	Fair	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair.
134A:										
Camden	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
134B:										
Camden	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
134C2:										
Camden	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
152A:										
Drummer	Fair	Fair	Good	Fair	Fair	Good	Good	Fair	Fair	Good.
172A:										
Hoopeston	Fair	Good	Good	Good	Good	Fair	Very poor.	Good	Good	Poor.
175B:										
Lamont	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
175C2:										
Lamont	Fair	Good	Good	Good	Good	Very poor.	Poor	Good	Good	Very poor.
175D2:										
Lamont	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
175D3:										
Lamont	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
175F2:										
Lamont	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
201A:										
Gilford	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
224C2:										
Strawn	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
224D2:										
Strawn	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
224D3:										
Strawn	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
224F2:										
Strawn	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
227B:										
Argyle	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
227C2:										
Argyle	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
261A:										
Niota	Fair	Fair	Good	Fair	Fair	Good	Good	Fair	Fair	Good.
268B:										
Mt. Carroll	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
268C2:										
Mt. Carroll	Fair	Good	Good	Good	Good	Very poor.	Poor	Good	Good	Very poor.
272A:										
Edgington	Fair	Fair	Good	Fair	Fair	Good	Good	Fair	Fair	Good.
274B:										
Seaton	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
274C:										
Seaton	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
274C2:										
Seaton	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
274D2:										
Seaton	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
274D3:										
Seaton	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
274E2:										
Seaton	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
274F:										
Seaton	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
275A:										
Joy	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
275B:										
Joy	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
277B:										
Port Byron	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
277C:										
Port Byron	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
277C2:										
Port Byron	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
279A:										
Rozetta	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
279B:										
Rozetta	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
280B:										
Fayette	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
280C:										
Fayette	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
280C2:										
Fayette	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
280C3:										
Fayette	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
280D2:										
Fayette	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
280D3:										
Fayette	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
280F2:										
Fayette	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
280G2:										
Fayette	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
403E2:										
Elizabeth	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
410C2:										
Woodbine	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
410D2:										
Woodbine	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
410D3:										
Woodbine	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
410F2:										
Woodbine	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
410G2:										
Woodbine	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
411B:										
Ashdale	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
411C2:										
Ashdale	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
412B:										
Ogle	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
412C2:										
Ogle	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
412C3:										
Ogle	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
414B:										
Myrtle	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
414C2:										
Myrtle	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
416C2:										
Durand	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
416C3:										
Durand	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
417D3:										
Derinda	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
417E2:										
Derinda	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
419B:										
Flagg	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
419C2:										
Flagg	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
419D2:										
Flagg	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
419D3:										
Flagg	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
429C2:										
Palsgrove	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
505D2:										
Dunbarton	Poor	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
505D3:										
Dunbarton	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
505E2:										
Dunbarton	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
505E3:										
Dunbarton	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
505F2:										
Dunbarton	Very poor.	Poor	Fair	Fair	Fair	Very poor.	Very poor.	Poor	Fair	Very poor.
505G:										
Dunbarton	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
506C2:										
Hitt	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
506C3:										
Hitt	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
546C2:										
Keltner	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
547C2:										
Eleroy	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
547D2:										
Eleroy	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
564B:										
Waukegan	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
564C2:										
Waukegan	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
565B:										
Tell	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
565C2:										
Tell	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
565D2:										
Tell	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
565D3:										
Tell	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
565F2:										
Tell	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
569F2:										
Medary	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
572C2:										
Loran	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
576A:										
Zwingle	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
576B:										
Zwingle	Fair	Fair	Fair	Fair	Fair	Poor	Very poor.	Fair	Fair	Good.
576C:										
Zwingle	Fair	Fair	Fair	Fair	Fair	Poor	Very poor.	Fair	Fair	Poor.
660D2:										
Coatsburg	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
660D3:										
Coatsburg	Fair	Fair	Fair	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
675A:										
Greenbush	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
675B:										
Greenbush	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
675C:										
Greenbush	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
675C2:										
Greenbush	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
689B:										
Coloma	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
689D:										
Coloma	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
689F:										
Coloma	Poor	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
735D2:										
Casco	Fair	Good	Good	Fair	Fair	Very poor.	Very poor.	Good	Fair	Very poor.
Rodman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Fox	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
735E2:										
Casco	Poor	Fair	Good	Fair	Fair	Very poor.	Very poor.	Fair	Fair	Very poor.
Rodman	Very poor.	Poor	Fair	Poor	Poor	Very poor.	Very poor.	Poor	Poor	Very poor.
Fox	Poor	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
764B:										
Coyne	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
785G:										
Lacrescent	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Fair	Very poor.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
798C2:										
Fayette	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Gale	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
802B.										
Orthents										
835G.										
Earthen dam										
862, 864, 865.										
Pits										
905F:										
NewGlarus	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Lamoille	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
905G:										
NewGlarus	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Lamoille	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
928C2:										
NewGlarus	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Palsgrove	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
928D2:										
NewGlarus	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Palsgrove	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
943F2:										
Seaton	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Timula	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
943G2:										
Seaton	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.
Timula	Very poor.	Poor	Good	Good	Good	Very poor.	Very poor.	Poor	Good	Very poor.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
952C2:										
Tell	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
Lamont	Fair	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
952D2:										
Tell	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Lamont	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
952D3:										
Tell	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
Lamont	Fair	Good	Good	Good	Good	Very poor.	Very poor.	Good	Good	Very poor.
952F2:										
Tell	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
Lamont	Very poor.	Fair	Good	Good	Good	Very poor.	Very poor.	Fair	Good	Very poor.
1076A:										
Otter	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
1082A:										
Millington	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
1107A:										
Sawmill	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
1239A:										
Dorchester	Poor	Fair	Fair	Good	Good	Poor	Poor	Fair	Good	Poor.
1451A:										
Lawson	Poor	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair.
3076A:										
Otter	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
3082A:										
Millington	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
3107+:										
Sawmill	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
3107A:										
Sawmill	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
3333A:										
Wakeland	Poor	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair.
3415A:										
Orion	Poor	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair.

Table 13.--Wildlife Habitat--Continued

Map symbol and soil name	Potential for habitat elements							Potential as habitat for--		
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hardwood trees	Conif-erous plants	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife
3451A: Lawson	Poor	Fair	Fair	Good	Good	Fair	Fair	Fair	Good	Fair.
3579A: Beavercreek	Poor	Fair	Fair	Good	Good	Poor	Very poor.	Fair	Good	Very poor.
3646L: Fluvaquents	Very poor.	Poor	Fair	Fair	Fair	Good	Good	Poor	Fair	Good.
7076A: Otter	Poor	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
7082A: Millington	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
7100A: Palms	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good.
7107+: Sawmill	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
7107A: Sawmill	Fair	Fair	Fair	Fair	Fair	Good	Good	Fair	Fair	Good.
7415A: Orion	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
7451A: Lawson	Fair	Good	Good	Good	Good	Good	Fair	Good	Good	Fair.
7452A: Riley	Fair	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair.
8077A: Huntsville	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor.
8239A: Dorchester	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.
8239B: Dorchester	Good	Good	Good	Good	Good	Poor	Very poor.	Good	Good	Very poor.

Table 14a.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
21C2:						
Pecatonica	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
21C3:						
Pecatonica	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
21D2:						
Pecatonica	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
21D3:						
Pecatonica	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
21F2:						
Pecatonica	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
29D3:						
Dubuque	Somewhat limited		Very limited		Very limited	
	Slope	0.96	Depth to hard bedrock	1.00	Slope	1.00
	Depth to hard bedrock	0.79	Slope	0.96	Depth to hard bedrock	0.79
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
37A:						
Worthen	Not limited		Not limited		Not limited	
37B:						
Worthen	Not limited		Not limited		Not limited	
37C:						
Worthen	Not limited		Not limited		Somewhat limited	
					Slope	0.97
51A:						
Muscatune	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51B:						
Muscatune	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
61A:						
Atterberry	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
61B:						
Atterberry	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
68A:						
Sable	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
68A+:						
Sable	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
81A:						
Littleton	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
81B:						
Littleton	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
86A:						
Osco	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to saturated zone	0.15		
86B:						
Osco	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to saturated zone	0.15		
86C:						
Osco	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to saturated zone	0.15	Shrink-swell	0.50

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
86C2:						
Osco	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to saturated zone	0.15	Shrink-swell	0.50
86C3:						
Osco	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to saturated zone	0.15	Shrink-swell	0.50
87A:						
Dickinson	Not limited		Not limited		Not limited	
87B:						
Dickinson	Not limited		Not limited		Not limited	
87C2:						
Dickinson	Not limited		Not limited		Somewhat limited	
					Slope	0.97
88A:						
Sparta	Not limited		Not limited		Not limited	
88B:						
Sparta	Not limited		Not limited		Not limited	
88C:						
Sparta	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.04	Slope	0.04	Slope	1.00
88E:						
Sparta	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
98A:						
Ade	Not limited		Not limited		Not limited	
98B:						
Ade	Not limited		Not limited		Somewhat limited	
					Slope	0.03
98D:						
Ade	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Slope	0.37	Slope	1.00
125A:						
Selma	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
134A:						
Camden	Somewhat limited		Not limited		Somewhat limited	
	Shrink-swell	0.50			Shrink-swell	0.50
134B:						
Camden	Somewhat limited		Not limited		Somewhat limited	
	Shrink-swell	0.50			Shrink-swell	0.50

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
134C2:						
Camden	Somewhat limited		Not limited		Somewhat limited	
	Shrink-swell	0.50			Slope	0.97
					Shrink-swell	0.50
152A:						
Drummer	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
172A:						
Hoopeston	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
175B:						
Lamont	Not limited		Not limited		Not limited	
175C2:						
Lamont	Not limited		Not limited		Somewhat limited	
					Slope	0.97
175D2:						
Lamont	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
175D3:						
Lamont	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
175F2:						
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
201A:						
Gilford	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
224C2:						
Strawn	Not limited		Not limited		Somewhat limited	
					Slope	0.97
224D2:						
Strawn	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
224D3:						
Strawn	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
224F2:						
Strawn	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
227B:						
Argyle	Not limited		Not limited		Not limited	

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
227C2:						
Argyle	Not limited		Not limited		Somewhat limited	
					Slope	0.97
261A:						
Niota	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	1.00	Ponding	1.00	Shrink-swell	1.00
	Ponding	1.00	Shrink-swell	0.50	Ponding	1.00
268B:						
Mt. Carroll	Not limited		Not limited		Not limited	
268C2:						
Mt. Carroll	Not limited		Not limited		Somewhat limited	
					Slope	0.97
272A:						
Edgington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
			Shrink-swell	0.50		
274B:						
Seaton	Not limited		Not limited		Not limited	
274C:						
Seaton	Not limited		Not limited		Somewhat limited	
					Slope	0.97
274C2:						
Seaton	Not limited		Not limited		Somewhat limited	
					Slope	0.97
274D2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
274D3:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
274E2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
274F:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
275A:						
Joy	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
275B:						
Joy	Somewhat limited		Very limited		Somewhat limited	
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
277B:						
Port Byron	Not limited		Not limited		Not limited	
277C:						
Port Byron	Not limited		Not limited		Somewhat limited	
					Slope	0.97
277C2:						
Port Byron	Not limited		Not limited		Somewhat limited	
					Slope	0.97
279A:						
Rozetta	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to saturated zone	0.15		
279B:						
Rozetta	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to saturated zone	0.15		
280B:						
Fayette	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
280C:						
Fayette	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
280C2:						
Fayette	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
280C3:						
Fayette	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
280D2:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
280D3:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
280F2:						
Fayette	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
280G2:						
Fayette	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
403E2:						
Elizabeth	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
	Slope	1.00	Slope	1.00	Depth to hard bedrock	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
410C2:						
Woodbine	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to hard bedrock	0.42	Shrink-swell	0.50
410D2:						
Woodbine	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to hard bedrock	0.42		
410D3:						
Woodbine	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to hard bedrock	0.42		
410F2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to hard bedrock	0.42		
410G2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to hard bedrock	0.42		
411B:						
Ashdale	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to hard bedrock	0.42		
411C2:						
Ashdale	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to hard bedrock	0.42	Shrink-swell	0.50
412B:						
Ogle	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
412C2:						
Ogle	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
412C3:						
Ogle	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
414B:						
Myrtle	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
414C2:						
Myrtle	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
416C2:						
Durand	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
416C3:						
Durand	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
417D3:						
Derinda	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Depth to saturated zone	0.97	Slope	1.00
	Shrink-swell	0.50	Slope	0.96	Shrink-swell	0.50
			Shrink-swell	0.50		
			Depth to soft bedrock	0.42		
417E2:						
Derinda	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Depth to saturated zone	0.97	Shrink-swell	0.50
			Shrink-swell	0.50		
			Depth to soft bedrock	0.42		
419B:						
Flagg	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
419C2:						
Flagg	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
419D2:						
Flagg	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
419D3:						
Flagg	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
429C2:						
Palsgrove	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to hard bedrock	0.42	Shrink-swell	0.50
505D2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
	Slope	0.04	Slope	0.04	Shrink-swell	0.50
505D3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Shrink-swell	1.00	Depth to hard bedrock	1.00
	Shrink-swell	1.00	Depth to hard bedrock	1.00	Shrink-swell	1.00
	Slope	0.04	Slope	0.04	Slope	1.00
505E2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Shrink-swell	1.00	Slope	1.00
	Shrink-swell	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00	Shrink-swell	1.00
505E3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Shrink-swell	1.00	Slope	1.00
	Shrink-swell	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00	Shrink-swell	1.00
505F2:						
Dunbarton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to hard bedrock	1.00	Shrink-swell	1.00	Depth to hard bedrock	1.00
	Shrink-swell	1.00	Depth to hard bedrock	1.00	Shrink-swell	1.00
505G:						
Dunbarton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to hard bedrock	1.00	Shrink-swell	1.00	Depth to hard bedrock	1.00
	Shrink-swell	1.00	Depth to hard bedrock	1.00	Shrink-swell	1.00
506C2:						
Hitt	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to hard bedrock	0.42	Shrink-swell	0.50
506C3:						
Hitt	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to hard bedrock	0.42	Shrink-swell	0.50

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
546C2:						
Keltner	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	0.99	Slope	0.97
			Shrink-swell	0.50	Shrink-swell	0.50
547C2:						
Eleroy	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	0.99	Slope	0.97
			Shrink-swell	0.50	Shrink-swell	0.50
547D2:						
Eleroy	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Depth to saturated zone	0.99	Slope	1.00
	Shrink-swell	0.50	Slope	0.96	Shrink-swell	0.50
			Shrink-swell	0.50		
564B:						
Waukegan	Not limited		Not limited		Not limited	
564C2:						
Waukegan	Not limited		Not limited		Somewhat limited	
					Slope	0.97
565B:						
Tell	Somewhat limited		Not limited		Somewhat limited	
	Shrink-swell	0.50			Shrink-swell	0.50
565C2:						
Tell	Somewhat limited		Not limited		Somewhat limited	
	Shrink-swell	0.50			Slope	0.97
					Shrink-swell	0.50
565D2:						
Tell	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
565D3:						
Tell	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
565F2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
569F2:						
Medary	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
			Depth to saturated zone	0.99		
572C2:						
Loran	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.50	Depth to saturated zone	1.00	Slope	0.97
	Depth to saturated zone	0.39	Shrink-swell	0.50	Shrink-swell	0.50
					Depth to saturated zone	0.39

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
576A:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
576B:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
576C:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
					Slope	0.97
660D2:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
	Shrink-swell	1.00	Shrink-swell	1.00	Depth to saturated zone	1.00
	Slope	0.96	Slope	0.96	Shrink-swell	1.00
660D3:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Slope	1.00
	Shrink-swell	1.00	Shrink-swell	1.00	Depth to saturated zone	1.00
	Slope	0.96	Slope	0.96	Shrink-swell	1.00
675A:						
Greenbush	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to saturated zone	0.15		
675B:						
Greenbush	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to saturated zone	0.15		
675C:						
Greenbush	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to saturated zone	0.15	Shrink-swell	0.50
675C2:						
Greenbush	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to saturated zone	0.15	Shrink-swell	0.50
689B:						
Coloma	Not limited		Not limited		Somewhat limited	
					Slope	0.03

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
689D:						
Coloma	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.37	Slope	0.37	Slope	1.00
689F:						
Coloma	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
735D2:						
Casco	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.16	Slope	0.16	Slope	1.00
Rodman	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.16	Slope	0.16	Slope	1.00
Fox	Somewhat limited		Somewhat limited		Very limited	
	Shrink-swell	0.50	Slope	0.16	Slope	1.00
	Slope	0.16			Shrink-swell	0.50
735E2:						
Casco	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Rodman	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Fox	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
764B:						
Coyne	Not limited		Not limited		Not limited	
785G:						
Lacrescent	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Content of large stones	0.31	Content of large stones	0.31	Content of large stones	0.31
798C2:						
Fayette	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
					Shrink-swell	0.50
Gale	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Depth to soft bedrock	0.71	Slope	0.97
			Shrink-swell	0.50	Shrink-swell	0.50
802B:						
Orthents	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
835G:						
Earthen dam	Not rated		Not rated		Not rated	
862:						
Pits	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
865:						
Pits, gravel	Not rated		Not rated		Not rated	
905F:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Depth to hard bedrock	1.00	Shrink-swell	0.50
	Depth to hard bedrock	0.42	Shrink-swell	0.50	Depth to hard bedrock	0.42
Lamoille	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
905G:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Depth to hard bedrock	1.00	Shrink-swell	0.50
	Depth to hard bedrock	0.42	Shrink-swell	0.50	Depth to hard bedrock	0.42
Lamoille	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
928C2:						
NewGlarus	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.50	Depth to hard bedrock	1.00	Slope	0.97
	Depth to hard bedrock	0.42	Shrink-swell	0.50	Shrink-swell	0.50
					Depth to hard bedrock	0.42
Palsgrove	Somewhat limited		Somewhat limited		Somewhat limited	
	Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.97
			Depth to hard bedrock	0.42	Shrink-swell	0.50
928D2:						
NewGlarus	Somewhat limited		Very limited		Very limited	
	Slope	0.96	Depth to hard bedrock	1.00	Slope	1.00
	Shrink-swell	0.50	Slope	0.96	Shrink-swell	0.50
	Depth to hard bedrock	0.42	Shrink-swell	0.50	Depth to hard bedrock	0.42
Palsgrove	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to hard bedrock	0.42		
943F2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Timula	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
943G2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
943G2:						
Timula	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
952C2:						
Tell	Not limited		Not limited		Somewhat limited	
					Slope	0.97
Lamont	Not limited		Not limited		Somewhat limited	
					Slope	0.97
952D2:						
Tell	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
Lamont	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
952D3:						
Tell	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
	Shrink-swell	0.50			Shrink-swell	0.50
Lamont	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.96	Slope	0.96	Slope	1.00
952F2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
1076A:						
Otter	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
1082A:						
Millington	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
1107A:						
Sawmill	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
1239A:						
Dorchester	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1451A:						
Lawson	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
			Shrink-swell	0.50		
3076A:						
Otter	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
3082A:						
Millington	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
3107+:						
Sawmill	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
3107A:						
Sawmill	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
3333A:						
Wakeland	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
3415A:						
Orion	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
3451A:						
Lawson	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
			Shrink-swell	0.50		
3579A:						
Beavercreek	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3646L:						
Fluvaquents	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
7076A:						
Otter	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
7082A:						
Millington	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
7100A:						
Palms	Very limited		Very limited		Very limited	
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Content of organic matter	1.00	Ponding	1.00	Content of organic matter	1.00
	Ponding	1.00			Ponding	1.00
7107+:						
Sawmill	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
7107A:						
Sawmill	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
7415A:						
Orion	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
7451A:						
Lawson	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.98	Depth to saturated zone	1.00	Depth to saturated zone	0.98
			Shrink-swell	0.50		

Table 14a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7452A:						
Riley	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	0.99	Depth to saturated zone	1.00	Depth to saturated zone	0.99
	Shrink-swell	0.50			Shrink-swell	0.50
8077A:						
Huntsville	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
			Depth to saturated zone	0.16		
8239A:						
Dorchester	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
8239B:						
Dorchester	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Flooding	1.00
	Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 14b.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Somewhat limited		Somewhat limited		Not limited	
	Shrink-swell	0.50	Cutbanks cave	0.10		
	Frost action	0.50				
21C2:						
Pecatonica	Somewhat limited		Somewhat limited		Not limited	
	Shrink-swell	0.50	Cutbanks cave	0.10		
	Frost action	0.50				
21C3:						
Pecatonica	Very limited		Somewhat limited		Not limited	
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
	Frost action	0.50				
21D2:						
Pecatonica	Very limited		Somewhat limited		Somewhat limited	
	Low strength	1.00	Slope	0.96	Slope	0.96
	Slope	0.96	Cutbanks cave	0.10		
	Shrink-swell	0.50				
	Frost action	0.50				
21D3:						
Pecatonica	Very limited		Somewhat limited		Somewhat limited	
	Low strength	1.00	Slope	0.96	Slope	0.96
	Slope	0.96	Cutbanks cave	0.10		
	Shrink-swell	0.50				
	Frost action	0.50				
21F2:						
Pecatonica	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
	Frost action	0.50				
29D3:						
Dubuque	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to hard bedrock	1.00	Slope	0.96
	Low strength	1.00			Depth to bedrock	0.80
	Slope	0.96	Slope	0.96		
	Depth to hard bedrock	0.79	Too clayey	0.82		
			Cutbanks cave	0.10		
	Shrink-swell	0.50				
37A:						
Worthen	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
37B:						
Worthen	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
37C:						
Worthen	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
51A:						
Muscatune	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.75				
	Shrink-swell	0.50				
51B:						
Muscatune	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.75				
	Shrink-swell	0.50				
61A:						
Atterberry	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.94
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.94				
	Shrink-swell	0.50				
61B:						
Atterberry	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.94
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.94				
	Shrink-swell	0.50				
68A:						
Sable	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Ponding	1.00	Ponding	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Ponding	1.00				
	Shrink-swell	0.50				
68A+:						
Sable	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Ponding	1.00	Ponding	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Ponding	1.00				
	Shrink-swell	0.50				
81A:						
Littleton	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.75				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
81B:						
Littleton	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00				
	Depth to saturated zone	0.75	Cutbanks cave	0.10		
86A:						
Osco	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00				
	Shrink-swell	0.50	Cutbanks cave	0.10		
86B:						
Osco	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00				
	Shrink-swell	0.50	Cutbanks cave	0.10		
86C:						
Osco	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00				
	Shrink-swell	0.50	Cutbanks cave	0.10		
86C2:						
Osco	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00				
	Shrink-swell	0.50	Cutbanks cave	0.10		
86C3:						
Osco	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00				
	Shrink-swell	0.50	Cutbanks cave	0.10		
87A:						
Dickinson	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
87B:						
Dickinson	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
87C2:						
Dickinson	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
88A:						
Sparta	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.08
88B:						
Sparta	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.08
88C:						
Sparta	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.04	Cutbanks cave	1.00	Droughty	0.07
			Slope	0.04	Slope	0.04

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
88E:						
Sparta	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
			Slope	1.00	Droughty	0.11
98A:						
Ade	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.15
98B:						
Ade	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.34
98D:						
Ade	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Slope	0.37
			Slope	0.37	Droughty	0.15
125A:						
Selma	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00		
	Shrink-swell	0.50				
	Low strength	0.22				
134A:						
Camden	Very limited		Very limited		Not limited	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00				
	Shrink-swell	0.50				
134B:						
Camden	Very limited		Very limited		Not limited	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00				
	Shrink-swell	0.50				
134C2:						
Camden	Very limited		Very limited		Not limited	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00				
	Shrink-swell	0.50				
152A:						
Drummer	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
	Low strength	1.00	Ponding	1.00		
	Ponding	1.00				
	Shrink-swell	0.50				
172A:						
Hoopeston	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Depth to saturated zone	0.75	Cutbanks cave	1.00		

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
175B:						
Lamont	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
175C2:						
Lamont	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
175D2:						
Lamont	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.96	Cutbanks cave	1.00	Slope	0.96
	Frost action	0.50	Slope	0.96		
175D3:						
Lamont	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.96	Cutbanks cave	1.00	Slope	0.96
	Frost action	0.50	Slope	0.96		
175F2:						
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Cutbanks cave	1.00		
201A:						
Gilford	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00		
224C2:						
Strawn	Somewhat limited		Somewhat limited		Not limited	
	Low strength	0.78	Cutbanks cave	0.10		
	Frost action	0.50				
224D2:						
Strawn	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
	Low strength	0.78	Cutbanks cave	0.10		
	Frost action	0.50				
224D3:						
Strawn	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
	Low strength	0.78	Cutbanks cave	0.10		
	Frost action	0.50				
224F2:						
Strawn	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	0.78	Cutbanks cave	0.10		
	Frost action	0.50				
227B:						
Argyle	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
227C2:						
Argyle	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
261A:						
Niota	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	1.00	Ponding	1.00
	Low strength	1.00	Ponding	1.00		
	Shrink-swell	1.00	Too clayey	0.41		
	Ponding	1.00				
268B:						
Mt. Carroll	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
268C2:						
Mt. Carroll	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
272A:						
Edgington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Ponding	1.00	Ponding	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Ponding	1.00				
274B:						
Seaton	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.50		
	Low strength	1.00				
274C:						
Seaton	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.50		
	Low strength	1.00				
274C2:						
Seaton	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.50		
	Low strength	1.00				
274D2:						
Seaton	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Slope	0.96	Slope	0.96
	Low strength	1.00	Cutbanks cave	0.50		
	Slope	0.96				
274D3:						
Seaton	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Slope	0.96	Slope	0.96
	Low strength	1.00	Cutbanks cave	0.50		
	Slope	0.96				
274E2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.50		
	Low strength	1.00				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
274F:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.50		
	Low strength	1.00				
275A:						
Joy	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.75				
275B:						
Joy	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.75				
277B:						
Port Byron	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.50		
	Low strength	1.00				
277C:						
Port Byron	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
277C2:						
Port Byron	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
279A:						
Rozetta	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
279B:						
Rozetta	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
280B:						
Fayette	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
280C:						
Fayette	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
280C2:						
Fayette	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
280C3:						
Fayette	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
280D2:						
Fayette	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Slope	0.96	Slope	0.96
	Low strength	1.00	Cutbanks cave	0.10		
	Slope	0.96				
	Shrink-swell	0.50				
280D3:						
Fayette	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Slope	0.96	Slope	0.96
	Low strength	1.00	Cutbanks cave	0.10		
	Slope	0.96				
	Shrink-swell	0.50				
280F2:						
Fayette	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
280G2:						
Fayette	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
403E2:						
Elizabeth	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	0.78	Cutbanks cave	0.10	Droughty	0.99
	Shrink-swell	0.50				
	Frost action	0.50				
410C2:						
Woodbine	Very limited		Somewhat limited		Not limited	
	Low strength	1.00	Too clayey	0.88		
	Shrink-swell	0.50	Depth to hard bedrock	0.42		
	Frost action	0.50	Cutbanks cave	0.10		

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
410D2:						
Woodbine	Very limited		Somewhat limited		Somewhat limited	
	Low strength	1.00	Slope	0.96	Slope	0.96
	Slope	0.96	Depth to hard bedrock	0.42		
	Shrink-swell	0.50	Too clayey	0.12		
	Frost action	0.50	Cutbanks cave	0.10		
410D3:						
Woodbine	Very limited		Somewhat limited		Somewhat limited	
	Low strength	1.00	Slope	0.96	Slope	0.96
	Slope	0.96	Too clayey	0.88		
	Shrink-swell	0.50	Depth to hard bedrock	0.42		
	Frost action	0.50	Cutbanks cave	0.10		
410F2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Too clayey	0.88		
	Shrink-swell	0.50	Depth to hard bedrock	0.42		
	Frost action	0.50	Cutbanks cave	0.10		
410G2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Too clayey	0.88		
	Shrink-swell	0.50	Depth to hard bedrock	0.42		
	Frost action	0.50	Cutbanks cave	0.10		
411B:						
Ashdale	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Too clayey	0.50		
	Low strength	1.00	Depth to hard bedrock	0.42		
	Shrink-swell	0.50	Cutbanks cave	0.10		
411C2:						
Ashdale	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Too clayey	0.50		
	Low strength	1.00	Depth to hard bedrock	0.42		
	Shrink-swell	0.50	Cutbanks cave	0.10		
412B:						
Ogle	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
412C2:						
Ogle	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
412C3:						
Ogle	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
414B:						
Myrtle	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
414C2:						
Myrtle	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
416C2:						
Durand	Somewhat limited		Somewhat limited		Not limited	
	Shrink-swell	0.50	Cutbanks cave	0.10		
	Frost action	0.50				
416C3:						
Durand	Very limited		Somewhat limited		Not limited	
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
	Frost action	0.50				
417D3:						
Derinda	Very limited		Somewhat limited		Somewhat limited	
	Low strength	1.00	Depth to saturated zone	0.97	Slope	0.96
	Slope	0.96			Depth to bedrock	0.42
	Shrink-swell	0.50	Slope	0.96		
	Frost action	0.50	Depth to soft bedrock	0.42		
			Cutbanks cave	0.10		
			Too clayey	0.01		
417E2:						
Derinda	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Depth to saturated zone	0.97	Depth to bedrock	0.42
	Shrink-swell	0.50				
	Frost action	0.50	Depth to soft bedrock	0.42		
			Cutbanks cave	0.10		
			Too clayey	0.01		
419B:						
Flagg	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
419C2:						
Flagg	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
419D2:						
Flagg	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Slope	0.96	Slope	0.96
	Low strength	1.00	Cutbanks cave	0.10		
	Slope	0.96				
	Shrink-swell	0.50				
419D3:						
Flagg	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Slope	0.96	Slope	0.96
	Low strength	1.00	Cutbanks cave	0.10		
	Slope	0.96				
	Shrink-swell	0.50				
429C2:						
Palsgrove	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Too clayey	0.88		
	Low strength	1.00	Depth to hard bedrock	0.42		
	Shrink-swell	0.50	Cutbanks cave	0.10		
505D2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
					Droughty	0.30
	Low strength	1.00	Cutbanks cave	0.10	Slope	0.04
	Shrink-swell	0.50	Slope	0.04		
	Frost action	0.50				
	Slope	0.04				
505D3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
					Droughty	0.86
	Low strength	1.00	Cutbanks cave	0.10	Slope	0.04
	Shrink-swell	1.00	Slope	0.04		
	Frost action	0.50				
	Slope	0.04				
505E2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
					Slope	1.00
	Low strength	1.00	Slope	1.00	Droughty	0.68
	Shrink-swell	1.00	Cutbanks cave	0.10		
	Slope	1.00				
	Frost action	0.50				
505E3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
					Slope	1.00
	Low strength	1.00	Slope	1.00	Droughty	0.86
	Shrink-swell	1.00	Cutbanks cave	0.10		
	Slope	1.00				
	Frost action	0.50				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
505F2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Cutbanks cave	0.10	Droughty	0.66
	Shrink-swell	1.00				
	Frost action	0.50				
505G:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Cutbanks cave	0.10	Droughty	0.77
	Shrink-swell	1.00				
	Frost action	0.50				
506C2:						
Hitt	Very limited		Somewhat limited		Not limited	
	Low strength	1.00	Too clayey	0.98		
	Shrink-swell	0.50	Depth to hard bedrock	0.42		
	Frost action	0.50	Cutbanks cave	0.10		
506C3:						
Hitt	Very limited		Somewhat limited		Not limited	
	Low strength	1.00	Too clayey	0.98		
	Shrink-swell	0.50	Depth to hard bedrock	0.42		
	Frost action	0.50	Cutbanks cave	0.10		
546C2:						
Keltner	Very limited		Very limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.99		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50	Too clayey	0.08		
547C2:						
Eleroy	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.99		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
547D2:						
Eleroy	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	0.99	Slope	0.96
	Low strength	1.00	Slope	0.96		
	Slope	0.96	Cutbanks cave	0.10		
	Shrink-swell	0.50				
564B:						
Waukegan	Very limited		Very limited		Not limited	
	Low strength	1.00	Cutbanks cave	1.00		
564C2:						
Waukegan	Very limited		Very limited		Not limited	
	Low strength	1.00	Cutbanks cave	1.00		

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
565B:						
Tell	Very limited		Very limited		Not limited	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00				
	Shrink-swell	0.50				
565C2:						
Tell	Very limited		Very limited		Not limited	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00				
	Shrink-swell	0.50				
565D2:						
Tell	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	1.00	Slope	0.96
	Slope	0.96	Slope	0.96		
565D3:						
Tell	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	1.00	Slope	0.96
	Low strength	1.00	Slope	0.96		
	Slope	0.96				
	Shrink-swell	0.50				
565F2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	1.00		
569F2:						
Medary	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Depth to saturated zone	0.99		
	Shrink-swell	1.00	Too clayey	0.32		
	Frost action	0.50	Cutbanks cave	0.10		
572C2:						
Loran	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.19
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50	Too clayey	0.03		
	Depth to saturated zone	0.19				
576A:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Cutbanks cave	1.00		
	Shrink-swell	1.00	Too clayey	0.41		
	Frost action	0.50				
576B:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Cutbanks cave	1.00		
	Shrink-swell	1.00	Too clayey	0.41		
	Frost action	0.50				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
576C:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Low strength	1.00	Cutbanks cave	1.00		
	Shrink-swell	1.00	Too clayey	0.41		
	Frost action	0.50				
660D2:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Slope	0.96	Slope	0.96
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	1.00	Too clayey	0.02		
	Slope	0.96				
660D3:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Slope	0.96	Slope	0.96
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	1.00	Too clayey	0.02		
	Slope	0.96				
675A:						
Greenbush	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
675B:						
Greenbush	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
675C:						
Greenbush	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
675C2:						
Greenbush	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Depth to saturated zone	0.15		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
689B:						
Coloma	Not limited		Very limited		Somewhat limited	
			Cutbanks cave	1.00	Too sandy	0.50
					Droughty	0.49
689D:						
Coloma	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Droughty	0.58
			Slope	0.37	Too sandy	0.50
					Slope	0.37

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
689F:						
Coloma	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Cutbanks cave	1.00	Droughty	0.58
					Too sandy	0.50
735D2:						
Casco	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.16	Cutbanks cave	1.00	Droughty	0.23
			Slope	0.16	Slope	0.16
Rodman	Somewhat limited		Very limited		Very limited	
	Slope	0.16	Cutbanks cave	1.00	Droughty	0.99
			Slope	0.16	Gravel content	0.17
					Slope	0.16
Fox	Somewhat limited		Very limited		Somewhat limited	
	Shrink-swell	0.50	Cutbanks cave	1.00	Slope	0.16
	Frost action	0.50	Slope	0.16		
	Slope	0.16				
735E2:						
Casco	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
			Slope	1.00	Droughty	0.45
Rodman	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
			Slope	1.00	Droughty	0.99
					Gravel content	0.17
Fox	Very limited		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
	Shrink-swell	0.50	Slope	1.00		
	Frost action	0.50				
764B:						
Coyne	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
			Dense layer	0.50		
785G:						
Lacrescent	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Content of large stones	0.31	Content of large stones	0.88
	Content of large stones	0.31	Cutbanks cave	0.10		
798C2:						
Fayette	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
Gale	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	1.00	Depth to bedrock	0.71
	Low strength	1.00	Depth to soft bedrock	0.71		
	Shrink-swell	0.50				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
802B:						
Orthents	Very limited		Somewhat limited		Not limited	
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
	Frost action	0.50				
835G:						
Earthen dam	Not rated		Not rated		Not rated	
862:						
Pits	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	
865:						
Pits, gravel	Not rated		Not rated		Not rated	
905F:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
	Frost action	1.00			Depth to bedrock	0.42
	Low strength	1.00	Slope	1.00		
	Shrink-swell	0.50	Too clayey	0.50		
	Depth to hard bedrock	0.42	Cutbanks cave	0.10		
Lamoille	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Too clayey	0.12		
	Shrink-swell	0.50	Cutbanks cave	0.10		
	Frost action	0.50				
905G:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
	Frost action	1.00			Depth to bedrock	0.42
	Low strength	1.00	Slope	1.00		
	Shrink-swell	0.50	Too clayey	0.50		
	Depth to hard bedrock	0.42	Cutbanks cave	0.10		
Lamoille	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Low strength	1.00	Too clayey	0.12		
	Shrink-swell	0.50	Cutbanks cave	0.10		
	Frost action	0.50				
928C2:						
NewGlarus	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to hard bedrock	1.00	Depth to bedrock	0.42
	Low strength	1.00				
	Shrink-swell	0.50	Too clayey	0.50		
	Depth to hard bedrock	0.42	Cutbanks cave	0.10		
Palsgrove	Very limited		Somewhat limited		Not limited	
	Frost action	1.00	Too clayey	0.88		
	Low strength	1.00	Depth to hard bedrock	0.42		
	Shrink-swell	0.50	Cutbanks cave	0.10		

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
928D2:						
NewGlarus	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to hard bedrock	1.00	Slope	0.96
	Low strength	1.00			Depth to bedrock	0.42
	Slope	0.96	Slope	0.96		
	Shrink-swell	0.50	Too clayey	0.50		
	Depth to hard bedrock	0.42	Cutbanks cave	0.10		
Palsgrove	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Slope	0.96	Slope	0.96
	Low strength	1.00	Too clayey	0.88		
	Slope	0.96	Depth to hard bedrock	0.42		
	Shrink-swell	0.50	Cutbanks cave	0.10		
943F2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.50		
	Low strength	1.00				
Timula	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.50		
943G2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
Timula	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	0.50		
952C2:						
Tell	Very limited		Very limited		Not limited	
	Frost action	1.00	Cutbanks cave	1.00		
Lamont	Somewhat limited		Very limited		Not limited	
	Frost action	0.50	Cutbanks cave	1.00		
952D2:						
Tell	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	1.00	Slope	0.96
	Slope	0.96	Slope	0.96		
Lamont	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.96	Cutbanks cave	1.00	Slope	0.96
	Frost action	0.50	Slope	0.96		
952D3:						
Tell	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Cutbanks cave	1.00	Slope	0.96
	Low strength	1.00	Slope	0.96		
	Slope	0.96				
	Shrink-swell	0.50				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
952D3:						
Lamont	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.96	Cutbanks cave	1.00	Slope	0.96
	Frost action	0.50	Slope	0.96		
952F2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	1.00	Cutbanks cave	1.00		
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Cutbanks cave	1.00		
1076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.80	Ponding	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Ponding	1.00				
1082A:						
Millington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.80	Ponding	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Ponding	1.00				
1107A:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.80	Ponding	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Ponding	1.00				
1239A:						
Dorchester	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Flooding	0.80	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
1451A:						
Lawson	Very limited		Very limited		Very limited	
	Frost action	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Flooding	0.80	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.75				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Flooding	0.80	Ponding	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Ponding	1.00				
3082A:						
Millington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Flooding	0.80	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
3107+:						
Sawmill	Very limited		Very limited		Very limited	
	Frost action	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Flooding	0.80	Depth to saturated zone	0.99
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.99				
	Shrink-swell	0.50				
3107A:						
Sawmill	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Flooding	0.80	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
3333A:						
Wakeland	Very limited		Very limited		Very limited	
	Frost action	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Flooding	0.80	Depth to saturated zone	0.94
	Depth to saturated zone	0.94	Cutbanks cave	0.10		
3415A:						
Orion	Very limited		Very limited		Very limited	
	Frost action	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	0.75
	Low strength	1.00	Flooding	0.80		
	Depth to saturated zone	0.75				
3451A:						
Lawson	Very limited		Very limited		Very limited	
	Frost action	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Flooding	1.00	Flooding	0.80	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	0.10		
	Depth to saturated zone	0.75				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3579A:						
Beavercreek	Very limited		Somewhat limited		Very limited	
	Flooding	1.00	Flooding	0.80	Flooding	1.00
			Cutbanks cave	0.10		
3646L:						
Fluvaquents	Very limited		Very limited		Very limited	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
	Frost action	1.00	Flooding	0.80	Depth to saturated zone	1.00
	Flooding	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
7076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Ponding	1.00	Ponding	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Ponding	1.00				
	Flooding	0.40				
7082A:						
Millington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
	Flooding	0.40				
7100A:						
Palms	Very limited		Very limited		Not rated	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
	Subsidence	1.00	Ponding	1.00		
	Frost action	1.00	Content of organic matter	1.00		
	Ponding	1.00	Cutbanks cave	0.10		
	Flooding	0.40				
7107+:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
	Flooding	0.40				
7107A:						
Sawmill	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Ponding	1.00	Ponding	1.00
	Low strength	1.00	Cutbanks cave	0.10		
	Ponding	1.00				
	Shrink-swell	0.50				

Table 14b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7415A:						
Orion	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Low strength	1.00	Cutbanks cave	1.00		
	Depth to saturated zone	0.75				
	Flooding	0.40				
7451A:						
Lawson	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.75
	Depth to saturated zone	0.75	Cutbanks cave	0.10		
	Flooding	0.40				
7452A:						
Riley	Very limited		Very limited		Somewhat limited	
	Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.78
	Low strength	1.00	Cutbanks cave	1.00		
	Depth to saturated zone	0.78				
	Shrink-swell	0.50				
	Flooding	0.40				
8077A:						
Huntsville	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Flooding	0.60	Flooding	0.60
	Flooding	1.00	Depth to saturated zone	0.16		
	Low strength	1.00	Cutbanks cave	0.10		
	Shrink-swell	0.50				
8239A:						
Dorchester	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Flooding	0.60	Flooding	0.60
	Flooding	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				
8239B:						
Dorchester	Very limited		Somewhat limited		Somewhat limited	
	Frost action	1.00	Flooding	0.60	Flooding	0.60
	Flooding	1.00	Cutbanks cave	0.10		
	Low strength	1.00				
	Shrink-swell	0.50				

Table 15a.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:				
Pecatonica	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
21C2:				
Pecatonica	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
21C3:				
Pecatonica	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
21D2:				
Pecatonica	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
21D3:				
Pecatonica	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
21F2:				
Pecatonica	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
29D3:				
Dubuque	Very limited		Very limited	
	Restricted permeability	1.00	Depth to hard bedrock	1.00
	Depth to bedrock	1.00	Slope	1.00
	Slope	0.96	Seepage	0.53
37A:				
Worthen	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
37B:				
Worthen	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
37C:				
Worthen	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
51A:				
Muscatune	Very limited Depth to saturated zone Restricted permeability	 1.00 0.46	Very limited Depth to saturated zone Seepage	 1.00 0.53
51B:				
Muscatune	Very limited Depth to saturated zone Restricted permeability	 1.00 0.46	Very limited Depth to saturated zone Seepage Slope	 1.00 0.53 0.18
61A:				
Atterberry	Very limited Depth to saturated zone Restricted permeability	 1.00 0.46	Very limited Depth to saturated zone Seepage	 1.00 0.53
61B:				
Atterberry	Very limited Depth to saturated zone Restricted permeability	 1.00 0.46	Very limited Depth to saturated zone Seepage Slope	 1.00 0.53 0.18
68A:				
Sable	Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.53
68A+:				
Sable	Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.53
81A:				
Littleton	Very limited Depth to saturated zone Restricted permeability	 1.00 0.46	Very limited Depth to saturated zone Seepage	 1.00 0.53
81B:				
Littleton	Very limited Depth to saturated zone Restricted permeability	 1.00 0.46	Very limited Depth to saturated zone Seepage Slope	 1.00 0.53 0.18

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
86A:				
Osco	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
	Depth to saturated zone	0.40		
86B:				
Osco	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
	Depth to saturated zone	0.40		
86C:				
Osco	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
	Depth to saturated zone	0.40		
86C2:				
Osco	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
	Depth to saturated zone	0.40		
86C3:				
Osco	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
	Depth to saturated zone	0.40		
87A:				
Dickinson	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
87B:				
Dickinson	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
			Slope	0.18
87C2:				
Dickinson	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
			Slope	1.00
88A:				
Sparta	Very limited		Very limited	
	Filtering capacity	1.00	Seepage	1.00
	Seepage (bottom layer)	1.00		

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
88B:				
Sparta	Very limited		Very limited	
	Filtering capacity	1.00	Seepage	1.00
	Seepage (bottom layer)	1.00	Slope	0.18
88C:				
Sparta	Very limited		Very limited	
	Filtering capacity	1.00	Seepage	1.00
	Seepage (bottom layer)	1.00	Slope	1.00
	Slope	0.04		
88E:				
Sparta	Very limited		Very limited	
	Filtering capacity	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Slope	1.00		
98A:				
Ade	Very limited		Very limited	
	Filtering capacity	1.00	Seepage	1.00
	Seepage (bottom layer)	1.00		
98B:				
Ade	Very limited		Very limited	
	Filtering capacity	1.00	Seepage	1.00
	Seepage (bottom layer)	1.00	Slope	0.50
98D:				
Ade	Very limited		Very limited	
	Filtering capacity	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Slope	0.37		
125A:				
Selma	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage (bottom layer)	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.46		
134A:				
Camden	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
	Restricted permeability	0.46		

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
134B:				
Camden	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
	Restricted permeability	0.46	Slope	0.18
134C2:				
Camden	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
	Restricted permeability	0.46	Slope	1.00
152A:				
Drummer	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.46	Seepage	0.53
172A:				
Hoopeston	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage (bottom layer)	1.00	Depth to saturated zone	1.00
175B:				
Lamont	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
			Slope	0.18
175C2:				
Lamont	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
			Slope	1.00
175D2:				
Lamont	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
	Slope	0.96	Seepage	1.00
175D3:				
Lamont	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
	Slope	0.96	Seepage	1.00
175F2:				
Lamont	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
201A:				
Gilford	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage (bottom layer)	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
224C2:				
Strawn	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
224D2:				
Strawn	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
224D3:				
Strawn	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
224F2:				
Strawn	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
227B:				
Argyle	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
227C2:				
Argyle	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
261A:				
Niota	Very limited		Very limited	
	Restricted permeability	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00	Ponding	1.00
	Ponding	1.00		
268B:				
Mt. Carroll	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
268C2:				
Mt. Carroll	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
272A:				
Edgington	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	1.00	Ponding	1.00
	Ponding	1.00	Seepage	0.53
274B:				
Seaton	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
274C:				
Seaton	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
274C2:				
Seaton	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
274D2:				
Seaton	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
274D3:				
Seaton	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
274E2:				
Seaton	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
274F:				
Seaton	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
275A:				
Joy	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
275B:				
Joy	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
277B:				
Port Byron	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
277C:				
Port Byron	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
277C2:				
Port Byron	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
279A:				
Rozetta	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
	Depth to saturated zone	0.40		
279B:				
Rozetta	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
	Depth to saturated zone	0.40		
280B:				
Fayette	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
280C:				
Fayette	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
280C2:				
Fayette	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
280C3:				
Fayette	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
280D2:				
Fayette	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
280D3:				
Fayette	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
280F2:				
Fayette	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
280G2:				
Fayette	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
403E2:				
Elizabeth	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	0.53
410C2:				
Woodbine	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
			Seepage	0.53
	Depth to bedrock	0.78	Depth to hard bedrock	0.42
410D2:				
Woodbine	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
			Seepage	0.53
	Slope	0.96	Depth to hard bedrock	0.42
	Depth to bedrock	0.78		
410D3:				
Woodbine	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
			Seepage	0.53
	Slope	0.96	Depth to hard bedrock	0.42
	Depth to bedrock	0.78		
410F2:				
Woodbine	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
			Seepage	0.53
	Slope	1.00	Depth to hard bedrock	0.42
	Depth to bedrock	0.78		
410G2:				
Woodbine	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
			Seepage	0.53
	Slope	1.00	Depth to hard bedrock	0.42
	Depth to bedrock	0.78		
411B:				
Ashdale	Somewhat limited		Somewhat limited	
	Depth to bedrock	0.78	Seepage	0.53
	Restricted permeability	0.46	Depth to hard bedrock	0.42
			Slope	0.18

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
411C2:				
Ashdale	Somewhat limited		Very limited	
	Depth to bedrock	0.78	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
			Depth to hard bedrock	0.42
412B:				
Ogle	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
412C2:				
Ogle	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
412C3:				
Ogle	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
414B:				
Myrtle	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
414C2:				
Myrtle	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
416C2:				
Durand	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
416C3:				
Durand	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
417D3:				
Derinda	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Depth to saturated zone	1.00	Slope	1.00
	Slope	0.96	Depth to saturated zone	1.00
417E2:				
Derinda	Very limited		Very limited	
	Restricted permeability	1.00	Depth to soft bedrock	1.00
	Depth to bedrock	1.00	Slope	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slope	1.00		

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
419B:				
Flagg	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18
419C2:				
Flagg	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
419D2:				
Flagg	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
419D3:				
Flagg	Somewhat limited		Very limited	
	Slope	0.96	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
429C2:				
Palsgrove	Somewhat limited		Very limited	
	Depth to bedrock	0.78	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
			Depth to hard bedrock	0.42
505D2:				
Dunbarton	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	0.04	Slope	1.00
			Seepage	0.53
505D3:				
Dunbarton	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	0.04	Slope	1.00
			Seepage	0.21
505E2:				
Dunbarton	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	0.21
505E3:				
Dunbarton	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	0.21

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
505F2:				
Dunbarton	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	0.21
505G:				
Dunbarton	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	0.21
506C2:				
Hitt	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
			Seepage	0.53
	Depth to bedrock	0.78	Depth to hard bedrock	0.42
506C3:				
Hitt	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
			Seepage	0.53
	Depth to bedrock	0.78	Depth to hard bedrock	0.42
546C2:				
Keltner	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
			Seepage	0.53
	Depth to saturated zone	1.00	Depth to soft bedrock	0.42
	Depth to bedrock	0.78	Depth to saturated zone	0.19
547C2:				
Eleroy	Very limited		Very limited	
	Depth to saturated zone	1.00	Slope	1.00
			Seepage	0.53
	Depth to bedrock	0.78	Depth to soft bedrock	0.42
	Restricted permeability	0.46	Depth to saturated zone	0.04
547D2:				
Eleroy	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
			Seepage	0.53
	Depth to saturated zone	1.00	Depth to soft bedrock	0.42
	Slope	0.96	Depth to saturated zone	0.04
	Depth to bedrock	0.78		
564B:				
Waukegan	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
			Slope	0.18
	Restricted permeability	0.46		

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
564C2:				
Waukegan	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
	Restricted permeability	0.46	Slope	1.00
565B:				
Tell	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
	Restricted permeability	0.46	Slope	0.18
565C2:				
Tell	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
	Restricted permeability	0.46	Slope	1.00
565D2:				
Tell	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
	Slope	0.96	Seepage	1.00
	Restricted permeability	0.46		
565D3:				
Tell	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
	Slope	0.96	Seepage	1.00
	Restricted permeability	0.46		
565F2:				
Tell	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Restricted permeability	0.46		
569F2:				
Medary	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slope	1.00		
572C2:				
Loran	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to bedrock	0.78	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
			Depth to soft bedrock	0.42

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
576A:				
Zwingle	Very limited		Very limited	
	Restricted permeability	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00		
576B:				
Zwingle	Very limited		Very limited	
	Restricted permeability	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00	Slope	0.18
576C:				
Zwingle	Very limited		Very limited	
	Restricted permeability	1.00	Seepage	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00	Slope	1.00
660D2:				
Coatsburg	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slope	0.96		
660D3:				
Coatsburg	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Slope	0.96		
675A:				
Greenbush	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
	Depth to saturated zone	0.40		
675B:				
Greenbush	Somewhat limited		Somewhat limited	
	Restricted permeability	0.46	Seepage	0.53
	Depth to saturated zone	0.40	Slope	0.18

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
675C:				
Greenbush	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
	Depth to saturated zone	0.40	Seepage	0.53
675C2:				
Greenbush	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
	Depth to saturated zone	0.40	Seepage	0.53
689B:				
Coloma	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
	Filtering capacity	1.00	Slope	0.50
689D:				
Coloma	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
	Filtering capacity	1.00	Seepage	1.00
	Slope	0.37		
689F:				
Coloma	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Filtering capacity	1.00		
735D2:				
Casco	Very limited		Very limited	
	Filtering capacity	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Slope	0.16		
Rodman	Very limited		Very limited	
	Filtering capacity	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Slope	0.16		
Fox	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	1.00
	Slope	0.16		

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
735E2:				
Casco	Very limited		Very limited	
	Filtering capacity	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Slope	1.00		
Rodman	Very limited		Very limited	
	Filtering capacity	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Slope	1.00		
Fox	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
	Slope	1.00	Seepage	1.00
	Restricted permeability	0.46		
764B:				
Coyne	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
	Restricted permeability	1.00	Slope	0.18
785G:				
Lacrescent	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Content of large stones	0.31	Content of large stones	0.74
798C2:				
Fayette	Somewhat limited		Very limited	
	Restricted permeability	0.46	Slope	1.00
			Seepage	0.53
Gale	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to soft bedrock	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Filtering capacity	1.00	Slope	1.00
802B:				
Orthents	Very limited		Somewhat limited	
	Restricted permeability	1.00	Slope	0.32
835G:				
Earthen dam	Not rated		Not rated	
862:				
Pits, sand	Not rated		Not rated	

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
864:				
Pits, quarries	Not rated		Not rated	
865:				
Pits, gravel	Not rated		Not rated	
905F:				
NewGlarus	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	0.28
Lamoille	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	1.00		
905G:				
NewGlarus	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00
			Seepage	0.28
Lamoille	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	1.00		
928C2:				
NewGlarus	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Restricted permeability	0.72	Slope	1.00
			Seepage	0.28
Palsgrove	Somewhat limited		Very limited	
	Depth to bedrock	0.78	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
			Depth to hard bedrock	0.42
928D2:				
NewGlarus	Very limited		Very limited	
	Depth to bedrock	1.00	Depth to hard bedrock	1.00
	Slope	0.96	Slope	1.00
	Restricted permeability	0.72	Seepage	0.28
Palsgrove	Very limited		Very limited	
	Restricted permeability	1.00	Slope	1.00
	Slope	0.96	Seepage	0.53
	Depth to bedrock	0.78	Depth to hard bedrock	0.42
943F2:				
Seaton	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
943F2:				
Timula	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
943G2:				
Seaton	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
Timula	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Restricted permeability	0.46	Seepage	0.53
952C2:				
Tell	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
			Slope	1.00
	Restricted permeability	0.46		
Lamont	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00
			Slope	1.00
952D2:				
Tell	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
			Seepage	1.00
	Slope	0.96		
	Restricted permeability	0.46		
Lamont	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
			Seepage	1.00
	Slope	0.96		
952D3:				
Tell	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
			Seepage	1.00
	Slope	0.96		
	Restricted permeability	0.46		
Lamont	Very limited		Very limited	
	Seepage (bottom layer)	1.00	Slope	1.00
			Seepage	1.00
	Slope	0.96		
952F2:				
Tell	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
	Restricted permeability	0.46		

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
952F2:				
Lamont	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00
1076A:				
Otter	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.46	Seepage	0.53
1082A:				
Millington	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.46	Seepage	0.53
1107A:				
Sawmill	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.46	Seepage	0.53
1239A:				
Dorchester	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
1451A:				
Lawson	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
3076A:				
Otter	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.46	Seepage	0.53

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
3082A:				
Millington	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
3107+:				
Sawmill	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
3107A:				
Sawmill	Very limited		Very limited	
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
3333A:				
Wakeland	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
3415A:				
Orion	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
3451A:				
Lawson	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
3579A:				
Beavercreek	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
3646L:				
Fluvaquents	Very limited		Very limited	
	Flooding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
7076A:				
Otter	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.46	Seepage	0.53
	Flooding	0.40	Flooding	0.40
7082A:				
Millington	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.46	Seepage	0.53
	Flooding	0.40	Flooding	0.40
7100A:				
Palms	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Subsidence	1.00	Seepage	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.72	Content of organic matter	1.00
	Flooding	0.40	Flooding	0.40
7107+:				
Sawmill	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
	Flooding	0.40	Flooding	0.40
7107A:				
Sawmill	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Restricted permeability	0.46	Seepage	0.53
	Flooding	0.40	Flooding	0.40
7415A:				
Orion	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
	Flooding	0.40	Flooding	0.40

Table 15a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
7451A:				
Lawson	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Seepage	0.53
	Flooding	0.40	Flooding	0.40
7452A:				
Riley	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage	1.00
	Seepage (bottom layer)	1.00	Depth to saturated zone	1.00
	Restricted permeability	0.46	Flooding	0.40
	Flooding	0.40		
8077A:				
Huntsville	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Restricted permeability	0.46	Seepage	0.53
	Depth to saturated zone	0.43		
8239A:				
Dorchester	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Restricted permeability	0.46	Seepage	0.53
8239B:				
Dorchester	Very limited		Very limited	
	Flooding	1.00	Flooding	1.00
	Restricted permeability	0.46	Seepage	0.53
			Slope	0.18

Table 15b.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Not limited		Not limited		Not limited	
21C2:						
Pecatonica	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
21C3:						
Pecatonica	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
21D2:						
Pecatonica	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
	Too clayey	0.50			Too clayey	0.50
21D3:						
Pecatonica	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
	Too clayey	0.50			Too clayey	0.50
21F2:						
Pecatonica	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too clayey	0.50			Too clayey	0.50
29D3:						
Dubuque	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	0.96	Slope	0.96	Slope	0.96
	Too clayey	0.50			Too clayey	0.50
37A:						
Worthen	Not limited		Not limited		Not limited	
37B:						
Worthen	Not limited		Not limited		Not limited	
37C:						
Worthen	Not limited		Not limited		Not limited	
51A:						
Muscatune	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too clayey	0.50			Too clayey	0.50
51B:						
Muscatune	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too clayey	0.50			Too clayey	0.50

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
61A:						
Atterberry	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too clayey	0.50			Too clayey	0.50
61B:						
Atterberry	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too clayey	0.50			Too clayey	0.50
68A:						
Sable	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Too clayey	0.50			Too clayey	0.50
68A+:						
Sable	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Hard to compact	1.00
	Too clayey	0.50			Ponding	1.00
					Too clayey	0.50
81A:						
Littleton	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
81B:						
Littleton	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
86A:						
Osco	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				
86B:						
Osco	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				
86C:						
Osco	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				
86C2:						
Osco	Very limited		Very limited		Not limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
86C3:						
Osco	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Not limited	
87A:						
Dickinson	Very limited Seepage (bottom layer) Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
87B:						
Dickinson	Very limited Seepage (bottom layer) Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
87C2:						
Dickinson	Very limited Seepage (bottom layer) Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
88A:						
Sparta	Very limited Seepage (bottom layer) Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
88B:						
Sparta	Very limited Seepage (bottom layer) Too sandy	1.00 0.50	Very limited Seepage	1.00	Very limited Seepage Too sandy	1.00 0.50
88C:						
Sparta	Very limited Seepage (bottom layer) Too sandy Slope	1.00 1.00 0.04	Very limited Seepage Slope	1.00 0.04	Very limited Too sandy Seepage Slope	1.00 1.00 0.04
88E:						
Sparta	Very limited Seepage (bottom layer) Too sandy Slope	1.00 1.00 1.00	Very limited Seepage Slope	1.00 1.00	Very limited Too sandy Seepage Slope	1.00 1.00 1.00
98A:						
Ade	Very limited Seepage (bottom layer) Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00
98B:						
Ade	Very limited Seepage (bottom layer) Too sandy	1.00 1.00	Very limited Seepage	1.00	Very limited Too sandy Seepage	1.00 1.00

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
98D:						
Ade	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37
125A:						
Selma	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00				
134A:						
Camden	Very limited		Not limited		Somewhat limited	
	Seepage (bottom layer)	1.00			Too clayey	0.50
	Too clayey	0.50				
134B:						
Camden	Very limited		Not limited		Somewhat limited	
	Seepage (bottom layer)	1.00			Too clayey	0.50
					Seepage	0.22
134C2:						
Camden	Very limited		Not limited		Somewhat limited	
	Seepage (bottom layer)	1.00			Too sandy	0.50
	Too sandy	0.50			Too clayey	0.50
					Seepage	0.22
152A:						
Drummer	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Too clayey	0.50			Too clayey	0.50
172A:						
Hoopeston	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	0.52
175B:						
Lamont	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50			Too sandy	0.50
175C2:						
Lamont	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50			Too sandy	0.50

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
175D2:						
Lamont	Very limited		Very limited		Somewhat limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Slope	0.96
	Slope	0.96	Slope	0.96	Seepage	0.52
175D3:						
Lamont	Very limited		Very limited		Somewhat limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Slope	0.96
	Slope	0.96	Slope	0.96	Seepage	0.52
175F2:						
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	0.52
201A:						
Gilford	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Ponding	1.00	Seepage	1.00
	Ponding	1.00			Ponding	1.00
224C2:						
Strawn	Not limited		Not limited		Not limited	
224D2:						
Strawn	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
224D3:						
Strawn	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
224F2:						
Strawn	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
227B:						
Argyle	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
227C2:						
Argyle	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
261A:						
Niota	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00				
268B:						
Mt. Carroll	Not limited		Not limited		Not limited	

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
268C2:						
Mt. Carroll	Not limited		Not limited		Not limited	
272A:						
Edgington	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Too clayey	0.50			Too clayey	0.50
274B:						
Seaton	Not limited		Not limited		Not limited	
274C:						
Seaton	Not limited		Not limited		Not limited	
274C2:						
Seaton	Not limited		Not limited		Not limited	
274D2:						
Seaton	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
274D3:						
Seaton	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
274E2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
274F:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
275A:						
Joy	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
275B:						
Joy	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
277B:						
Port Byron	Not limited		Not limited		Not limited	
277C:						
Port Byron	Not limited		Not limited		Not limited	
277C2:						
Port Byron	Not limited		Not limited		Not limited	
279A:						
Rozetta	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
279B:						
Rozetta	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				
280B:						
Fayette	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
280C:						
Fayette	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
280C2:						
Fayette	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
280C3:						
Fayette	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
280D2:						
Fayette	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
	Too clayey	0.50			Too clayey	0.50
280D3:						
Fayette	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
	Too clayey	0.50			Too clayey	0.50
280F2:						
Fayette	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too clayey	0.50			Too clayey	0.50
280G2:						
Fayette	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too clayey	0.50			Too clayey	0.50
403E2:						
Elizabeth	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
410C2:						
Woodbine	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
410D2:						
Woodbine	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Slope	0.96	Slope	0.96
	Slope	0.96	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
410D3:						
Woodbine	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Slope	0.96	Slope	0.96
	Slope	0.96	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
410F2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
410G2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
411B:						
Ashdale	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
411C2:						
Ashdale	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
412B:						
Ogle	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
412C2:						
Ogle	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
412C3:						
Ogle	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
414B:						
Myrtle	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
414C2:						
Myrtle	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
416C2:						
Durand	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
416C3:						
Durand	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
417D3:						
Derinda	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	1.00
	Too clayey	1.00	Slope	0.96	Slope	0.96
	Slope	0.96			Depth to saturated zone	0.14
417E2:						
Derinda	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Slope	1.00	Depth to bedrock	1.00
	Slope	1.00	Depth to saturated zone	1.00	Slope	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Too clayey	0.50
	Too clayey	0.50			Depth to saturated zone	0.14
419B:						
Flagg	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
419C2:						
Flagg	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
419D2:						
Flagg	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
	Too clayey	0.50			Too clayey	0.50
419D3:						
Flagg	Somewhat limited		Somewhat limited		Somewhat limited	
	Slope	0.96	Slope	0.96	Slope	0.96
	Too clayey	0.50			Too clayey	0.50
429C2:						
Palsgrove	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
505D2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too clayey	0.50	Slope	0.04	Too clayey	0.50
	Slope	0.04			Slope	0.04
505D3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too clayey	1.00	Slope	0.04	Too clayey	1.00
	Slope	0.04			Hard to compact	1.00
					Slope	0.04
505E2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too clayey	1.00	Slope	1.00	Too clayey	1.00
	Slope	1.00			Hard to compact	1.00
					Slope	1.00

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
505E3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too clayey	1.00	Slope	1.00	Too clayey	1.00
	Slope	1.00			Hard to compact	1.00
					Slope	1.00
505F2:						
Dunbarton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Too clayey	1.00			Too clayey	1.00
					Hard to compact	1.00
505G:						
Dunbarton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Too clayey	1.00			Too clayey	1.00
					Hard to compact	1.00
506C2:						
Hitt	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
506C3:						
Hitt	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
546C2:						
Keltner	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Depth to saturated zone	0.86	Depth to saturated zone	0.19	Depth to saturated zone	0.47
	Too clayey	0.50			Depth to bedrock	0.42
547C2:						
Eleroy	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Depth to saturated zone	0.68	Depth to saturated zone	0.04	Depth to bedrock	0.42
	Too clayey	0.50			Depth to saturated zone	0.24
547D2:						
Eleroy	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Slope	0.96	Slope	0.96
	Slope	0.96	Depth to bedrock	0.42	Too clayey	0.50
	Depth to saturated zone	0.68	Depth to saturated zone	0.04	Depth to bedrock	0.42
	Too clayey	0.50			Depth to saturated zone	0.24
564B:						
Waukegan	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
564C2:						
Waukegan	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
565B:						
Tell	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50			Too sandy	0.50
565C2:						
Tell	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50			Too sandy	0.50
565D2:						
Tell	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Slope	0.96	Slope	0.96	Slope	0.96
	Too sandy	0.50			Too sandy	0.50
565D3:						
Tell	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Slope	0.96	Slope	0.96	Slope	0.96
	Too sandy	0.50			Too sandy	0.50
565F2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50			Too sandy	0.50
569F2:						
Medary	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Slope	1.00	Slope	1.00
	Slope	1.00	Depth to saturated zone	1.00	Too clayey	1.00
	Too clayey	1.00			Depth to saturated zone	0.29
572C2:						
Loran	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
576A:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00			Too clayey	1.00
	Too clayey	1.00			Hard to compact	1.00

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
576B:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00			Too clayey	1.00
	Too clayey	1.00			Hard to compact	1.00
576C:						
Zwingle	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage (bottom layer)	1.00			Too clayey	1.00
	Too clayey	1.00			Hard to compact	1.00
660D2:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too clayey	1.00	Slope	0.96	Too clayey	1.00
	Slope	0.96			Hard to compact	1.00
					Slope	0.96
660D3:						
Coatsburg	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too clayey	1.00	Slope	0.96	Too clayey	1.00
	Slope	0.96			Hard to compact	1.00
					Slope	0.96
675A:						
Greenbush	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				
675B:						
Greenbush	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				
675C:						
Greenbush	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				
675C2:						
Greenbush	Very limited		Very limited		Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				
689B:						
Coloma	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
689D:						
Coloma	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37
689F:						
Coloma	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
735D2:						
Casco	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.16	Seepage	1.00
	Slope	0.16			Gravel content	0.81
					Slope	0.16
Rodman	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.16	Seepage	1.00
	Slope	0.16			Gravel content	0.97
					Slope	0.16
Fox	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.16	Seepage	1.00
	Slope	0.16			Slope	0.16
735E2:						
Casco	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
					Gravel content	0.86
Rodman	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
					Gravel content	0.97
Fox	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
764B:						
Coyne	Very limited		Very limited		Not limited	
	Seepage (bottom layer)	1.00	Seepage	1.00		

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
785G:						
Lacrescent	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00	Content of large stones	0.66
	Content of large stones	0.66			Seepage	0.52
798C2:						
Fayette	Somewhat limited		Not limited		Somewhat limited	
	Too clayey	0.50			Too clayey	0.50
Gale	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
	Seepage (bottom layer)	1.00	Depth to bedrock	1.00		
802B:						
Orthents	Not limited		Not limited		Not limited	
835G:						
Earthen dam	Not rated		Not rated		Not rated	
862:						
Pits, sand	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	
865:						
Pits, gravel	Not rated		Not rated		Not rated	
905F:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Too clayey	0.50			Too clayey	0.50
Lamoille	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too clayey	1.00			Too clayey	1.00
					Hard to compact	1.00
					Gravel content	0.12
905G:						
NewGlarus	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
	Too clayey	0.50			Too clayey	0.50
Lamoille	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too clayey	1.00			Too clayey	1.00
					Hard to compact	1.00
					Gravel content	0.12
928C2:						
NewGlarus	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Too clayey	0.50			Too clayey	0.50

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
928C2:						
Palsgrove	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
928D2:						
NewGlarus	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
	Slope	0.96	Slope	0.96	Slope	0.96
	Too clayey	0.50			Too clayey	0.50
Palsgrove	Very limited		Somewhat limited		Somewhat limited	
	Depth to bedrock	1.00	Slope	0.96	Slope	0.96
	Slope	0.96	Depth to bedrock	0.42	Too clayey	0.50
	Too clayey	0.50			Depth to bedrock	0.42
943F2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Timula	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
943G2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
Timula	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
952C2:						
Tell	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50			Too sandy	0.50
Lamont	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50			Too sandy	0.50
952D2:						
Tell	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Slope	0.96	Slope	0.96	Slope	0.96
	Too sandy	0.50			Too sandy	0.50
Lamont	Very limited		Very limited		Somewhat limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Slope	0.96
	Slope	0.96	Slope	0.96	Seepage	0.52
952D3:						
Tell	Very limited		Very limited		Very limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Slope	0.96	Slope	0.96	Slope	0.96
	Too sandy	0.50			Too sandy	0.50

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
952D3:						
Lamont	Very limited		Very limited		Somewhat limited	
	Seepage (bottom layer)	1.00	Seepage	1.00	Slope	0.96
	Slope	0.96	Slope	0.96	Seepage	0.52
952F2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50			Too sandy	0.50
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	0.52
1076A:						
Otter	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00		
1082A:						
Millington	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00		
1107A:						
Sawmill	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00	Too clayey	0.50
	Too clayey	0.50				
1239A:						
Dorchester	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
1451A:						
Lawson	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
3076A:						
Otter	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
	Ponding	1.00	Ponding	1.00		

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3082A:						
Millington	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
3107+:						
Sawmill	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
	Too clayey	0.50			Too clayey	0.50
3107A:						
Sawmill	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00	Too clayey	0.50
	Too clayey	0.50				
3333A:						
Wakeland	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
3415A:						
Orion	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
3451A:						
Lawson	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00		
3579A:						
Beavercreek	Very limited		Very limited		Somewhat limited	
	Flooding	1.00	Flooding	1.00	Gravel content	0.61
	Seepage (bottom layer)	1.00	Seepage	1.00	Seepage	0.52
3646L:						
Fluvaquents	Very limited		Very limited		Very limited	
	Flooding	1.00	Flooding	1.00	Ponding	1.00
	Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Depth to saturated zone	1.00		
7076A:						
Otter	Very limited		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Flooding	0.40	Flooding	0.40		

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7082A:						
Millington	Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	Very limited Depth to saturated zone Ponding	 1.00 1.00
7100A:						
Palms	Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	Very limited Depth to saturated zone Seepage Ponding Flooding	 1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Ponding	 1.00 1.00
7107+:						
Sawmill	Very limited Depth to saturated zone Too clayey Flooding	 1.00 0.50 0.40	Very limited Depth to saturated zone Flooding	 1.00 0.40	Very limited Depth to saturated zone Too clayey	 1.00 0.50
7107A:						
Sawmill	Very limited Depth to saturated zone Ponding Too clayey Flooding	 1.00 1.00 0.50 0.40	Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	Very limited Depth to saturated zone Ponding Too clayey	 1.00 1.00 0.50
7415A:						
Orion	Very limited Depth to saturated zone Flooding	 1.00 0.40	Very limited Depth to saturated zone Flooding	 1.00 0.40	Very limited Depth to saturated zone	 1.00
7451A:						
Lawson	Very limited Depth to saturated zone Flooding	 1.00 0.40	Very limited Depth to saturated zone Flooding	 1.00 0.40	Very limited Depth to saturated zone	 1.00
7452A:						
Riley	Very limited Depth to saturated zone Seepage (bottom layer) Too sandy Flooding	 1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Seepage Flooding	 1.00 1.00 0.40	Very limited Depth to saturated zone Too sandy Seepage	 1.00 1.00 1.00
8077A:						
Huntsville	Very limited Flooding Depth to saturated zone	 1.00 1.00	Very limited Flooding Depth to saturated zone	 1.00 1.00	Not limited	
8239A:						
Dorchester	Very limited Flooding	 1.00	Very limited Flooding	 1.00	Not limited	

Table 15b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
8239B: Dorchester	Very limited Flooding	1.00	Very limited Flooding	1.00	Not limited	

Table 16a.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table.

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
21B:				
Pecatonica	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
21C2:				
Pecatonica	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
21C3:				
Pecatonica	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
21D2:				
Pecatonica	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
21D3:				
Pecatonica	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
21F2:				
Pecatonica	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
29D3:				
Dubuque	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
37A:				
Worthen	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
37B:				
Worthen	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
37C:				
Worthen	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
51A:				
Muscatune	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
51B:				
Muscatune	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
61A:				
Atterberry	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
61B:				
Atterberry	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
68A:				
Sable	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
68A+:				
Sable	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
81A:				
Littleton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
81B:				
Littleton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
86A:				
Osco	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
86B:				
Osco	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
86C:				
Osco	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
86C2:				
Osco	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
86C3:				
Osco	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
87A:				
Dickinson	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.01
	Thickest layer	0.00	Bottom layer	0.67
87B:				
Dickinson	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.04
	Thickest layer	0.00	Bottom layer	0.67
87C2:				
Dickinson	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.04
	Thickest layer	0.00	Bottom layer	0.67
88A:				
Sparta	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.36
	Thickest layer	0.00	Bottom layer	0.76
88B:				
Sparta	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.36
	Thickest layer	0.00	Bottom layer	0.76
88C:				
Sparta	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.36
	Thickest layer	0.00	Bottom layer	0.76
88E:				
Sparta	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.31
	Thickest layer	0.00	Thickest layer	0.36
98A:				
Ade	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.09
	Thickest layer	0.00	Thickest layer	0.10
98B:				
Ade	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.06
	Thickest layer	0.00	Bottom layer	0.58
98D:				
Ade	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.09
	Thickest layer	0.00	Thickest layer	0.10
125A:				
Selma	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.06

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
134A:				
Camden	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.08
134B:				
Camden	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.08
134C2:				
Camden	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.08
152A:				
Drummer	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
172A:				
Hoopeston	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.04
	Thickest layer	0.00	Bottom layer	0.22
175B:				
Lamont	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.03
	Thickest layer	0.00	Bottom layer	0.19
175C2:				
Lamont	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.03
	Thickest layer	0.00	Bottom layer	0.19
175D2:				
Lamont	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.03
	Thickest layer	0.00	Bottom layer	0.19
175D3:				
Lamont	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.03
	Thickest layer	0.00	Bottom layer	0.19
175F2:				
Lamont	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.03
	Thickest layer	0.00	Bottom layer	0.19
201A:				
Gilford	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.08
	Thickest layer	0.00	Bottom layer	0.22
224C2:				
Strawn	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
224D2:				
Strawn	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
224D3:				
Strawn	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
224F2:				
Strawn	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
227B:				
Argyle	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.17
227C2:				
Argyle	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.17
261A:				
Niota	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.06
268B:				
Mt. Carroll	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
268C2:				
Mt. Carroll	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
272A:				
Edgington	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
274B:				
Seaton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
274C:				
Seaton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
274C2:				
Seaton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
274D2:				
Seaton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
274D3:				
Seaton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
274E2:				
Seaton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
274F:				
Seaton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
275A:				
Joy	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
275B:				
Joy	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
277B:				
Port Byron	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
277C:				
Port Byron	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
277C2:				
Port Byron	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
279A:				
Rozetta	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
279B:				
Rozetta	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
280B:				
Fayette	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
280C:				
Fayette	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
280C2:				
Fayette	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
280C3:				
Fayette	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
280D2:				
Fayette	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
280D3:				
Fayette	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
280F2:				
Fayette	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
280G2:				
Fayette	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
403E2:				
Elizabeth	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
410C2:				
Woodbine	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
410D2:				
Woodbine	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
410D3:				
Woodbine	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
410F2:				
Woodbine	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
410G2:				
Woodbine	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
411B:				
Ashdale	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
411C2:				
Ashdale	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
412B:				
Ogle	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
412C2:				
Ogle	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
412C3:				
Ogle	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
414B:				
Myrtle	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
414C2:				
Myrtle	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
416C2:				
Durand	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
416C3:				
Durand	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
417D3:				
Derinda	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
417E2:				
Derinda	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
419B:				
Flagg	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
419C2:				
Flagg	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
419D2:				
Flagg	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
419D3:				
Flagg	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
429C2:				
Palsgrove	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
505D2:				
Dunbarton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
505D3:				
Dunbarton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
505E2:				
Dunbarton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
505E3:				
Dunbarton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
505F2:				
Dunbarton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
505G:				
Dunbarton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
506C2:				
Hitt	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
506C3:				
Hitt	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
546C2:				
Keltner	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
547C2:				
Eleroy	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
547D2:				
Eleroy	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
564B:				
Waukegan	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.97
564C2:				
Waukegan	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.91
565B:				
Tell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
565C2:				
Tell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
565D2:				
Tell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
565D3:				
Tell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
565F2:				
Tell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
569F2:				
Medary	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
572C2:				
Loran	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
576A:				
Zwingle	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.10
576B:				
Zwingle	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.10
576C:				
Zwingle	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.10
660D2:				
Coatsburg	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
660D3:				
Coatsburg	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
675A:				
Greenbush	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
675B:				
Greenbush	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
675C:				
Greenbush	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
675C2:				
Greenbush	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
689B:				
Coloma	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.58
	Thickest layer	0.00	Thickest layer	0.76
689D:				
Coloma	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.58
	Thickest layer	0.00	Thickest layer	0.83

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
689F:				
Coloma	Poor		Fair	
	Bottom layer	0.00	Bottom layer	0.58
	Thickest layer	0.00	Thickest layer	0.83
735D2:				
Casco	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.86
Rodman	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.01
	Thickest layer	0.00	Bottom layer	0.22
Fox	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.31
735E2:				
Casco	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.86
Rodman	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.01
	Thickest layer	0.00	Bottom layer	0.22
Fox	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.31
764B:				
Coyne	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.06
	Thickest layer	0.00	Bottom layer	0.90
785G:				
Lacrescent	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
798C2:				
Fayette	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Gale	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.87
802B:				
Orthents	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
835G:				
Earthen dam	Not rated		Not rated	
862:				
Pits, sand	Not rated		Not rated	

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
864:				
Pits, quarries	Not rated		Not rated	
865:				
Pits, gravel	Not rated		Not rated	
905F:				
NewGlarus	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Lamoille	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
905G:				
NewGlarus	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Lamoille	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
928C2:				
NewGlarus	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Palsgrove	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
928D2:				
NewGlarus	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Palsgrove	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
943F2:				
Seaton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Timula	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
943G2:				
Seaton	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Timula	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
952C2:				
Tell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
Lamont	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.03
	Thickest layer	0.00	Bottom layer	0.19
952D2:				
Tell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
Lamont	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.03
	Thickest layer	0.00	Bottom layer	0.19
952D3:				
Tell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
Lamont	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.03
	Thickest layer	0.00	Bottom layer	0.19
952F2:				
Tell	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.09
Lamont	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.03
	Thickest layer	0.00	Bottom layer	0.19
1076A:				
Otter	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
1082A:				
Millington	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
1107A:				
Sawmill	Poor		Poor	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.00
1239A:				
Dorchester	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
1451A:				
Lawson	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
3076A:				
Otter	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
3082A:				
Millington	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
3107+:				
Sawmill	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
3107A:				
Sawmill	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
3333A:				
Wakeland	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
3415A:				
Orion	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
3451A:				
Lawson	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
3579A:				
Beavercreek	Poor		Poor	
	Thickest layer	0.00	Bottom layer	0.00
	Bottom layer	0.00	Thickest layer	0.00
3646L:				
Fluvaquents	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
7076A:				
Otter	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
7082A:				
Millington	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
7100A:				
Palms	Not rated		Not rated	
	Bottom layer	0.00	Bottom layer	0.00

Table 16a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		Potential as source of sand	
	Rating class	Value	Rating class	Value
7107+:				
Sawmill	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
7107A:				
Sawmill	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
7415A:				
Orion	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
7451A:				
Lawson	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
7452A:				
Riley	Poor		Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.26
8077A:				
Huntsville	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
8239A:				
Dorchester	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
8239B:				
Dorchester	Poor		Poor	
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00

Table 16b.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Fair		Fair		Fair	
	Low content of organic matter	0.12	Shrink-swell	0.94	Too clayey	0.57
	Water erosion	0.68				
	Too acid	0.74				
	Too clayey	0.98				
21C2:						
Pecatonica	Fair		Fair		Fair	
	Low content of organic matter	0.24	Shrink-swell	0.95	Too clayey	0.60
	Too acid	0.54				
	Water erosion	0.90				
	Too clayey	0.98				
21C3:						
Pecatonica	Fair		Poor		Fair	
	Low content of organic matter	0.24	Low strength	0.00	Too clayey	0.60
	Too acid	0.74	Shrink-swell	0.91		
	Too clayey	0.98				
21D2:						
Pecatonica	Fair		Poor		Fair	
	Low content of organic matter	0.24	Low strength	0.00	Slope	0.04
	Too acid	0.54	Shrink-swell	0.95	Too clayey	0.60
	Water erosion	0.90				
	Too clayey	0.98				
21D3:						
Pecatonica	Fair		Poor		Fair	
	Low content of organic matter	0.24	Low strength	0.00	Slope	0.04
	Too acid	0.74	Shrink-swell	0.91	Too clayey	0.60
	Too clayey	0.98				
21F2:						
Pecatonica	Fair		Poor		Poor	
	Low content of organic matter	0.24	Slope	0.00	Slope	0.00
	Too acid	0.74	Low strength	0.00	Too clayey	0.60
	Water erosion	0.90	Shrink-swell	0.96	Rock fragments	0.98
	Too clayey	0.98				
29D3:						
Dubuque	Fair		Poor		Fair	
	Depth to bedrock	0.21	Depth to bedrock	0.00	Slope	0.04
	Low content of organic matter	0.24	Low strength	0.00	Depth to bedrock	0.21
	Droughty	0.71	Shrink-swell	0.66	Too clayey	0.60
	Too acid	0.74				
	Too clayey	0.98				
	Water erosion	0.99				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
37A:						
Worthen	Fair		Poor		Good	
	Water erosion	0.68	Low strength	0.00		
37B:						
Worthen	Fair		Poor		Good	
	Water erosion	0.68	Low strength	0.00		
37C:						
Worthen	Fair		Poor		Good	
	Water erosion	0.68	Low strength	0.00		
51A:						
Muscatune	Fair		Poor		Fair	
	Too acid	0.84	Low strength	0.00	Depth to saturated zone	0.14
	Too clayey	0.92	Depth to saturated zone	0.14	Too clayey	0.67
	Low content of organic matter	0.92	Shrink-swell	0.99		
	Water erosion	0.99				
51B:						
Muscatune	Fair		Poor		Fair	
	Too clayey	0.92	Low strength	0.00	Depth to saturated zone	0.14
	Too acid	0.97	Depth to saturated zone	0.14	Too clayey	0.72
	Water erosion	0.99	Shrink-swell	0.99		
61A:						
Atterberry	Fair		Poor		Fair	
	Low content of organic matter	0.18	Low strength	0.00	Depth to saturated zone	0.04
	Too acid	0.54	Depth to saturated zone	0.04	Too clayey	0.55
	Water erosion	0.90	Shrink-swell	0.99	Too acid	0.98
	Too clayey	0.92				
61B:						
Atterberry	Fair		Poor		Fair	
	Low content of organic matter	0.18	Low strength	0.00	Depth to saturated zone	0.04
	Too acid	0.54	Depth to saturated zone	0.04	Too clayey	0.55
	Water erosion	0.90	Shrink-swell	0.98	Too acid	0.98
	Too clayey	0.92				
68A:						
Sable	Fair		Poor		Poor	
	Low content of organic matter	0.68	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Too clayey	0.98	Low strength	0.00	Too clayey	0.98
	Water erosion	0.99	Shrink-swell	0.87		
68A+:						
Sable	Fair		Poor		Poor	
	Low content of organic matter	0.68	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Too clayey	0.98	Low strength	0.00	Too clayey	0.67
	Water erosion	0.99	Shrink-swell	0.97		

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
81A:						
Littleton	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Depth to saturated zone	0.14
	Water erosion	0.68	Depth to saturated zone	0.14		
81B:						
Littleton	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Depth to saturated zone	0.14
	Water erosion	0.68	Depth to saturated zone	0.14		
86A:						
Osco	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.64
	Water erosion	0.68	Shrink-swell	0.87		
	Too acid	0.84				
	Too clayey	0.98				
86B:						
Osco	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.64
	Too acid	0.84	Shrink-swell	0.87		
	Too clayey	0.98				
	Water erosion	0.99				
86C:						
Osco	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.64
	Too acid	0.84	Shrink-swell	0.91		
	Too clayey	0.98				
	Water erosion	0.99				
86C2:						
Osco	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.64
	Water erosion	0.68	Shrink-swell	0.87		
	Too acid	0.84				
	Too clayey	0.98				
86C3:						
Osco	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.64
	Water erosion	0.68	Shrink-swell	0.87		
	Too acid	0.84				
	Too clayey	0.98				
87A:						
Dickinson	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.84				
	Droughty	0.96				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
87B:						
Dickinson	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.84				
87C2:						
Dickinson	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.84				
	Droughty	0.93				
88A:						
Sparta	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00				
	Low content of organic matter	0.12				
	Too acid	0.74				
88B:						
Sparta	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00				
	Low content of organic matter	0.60				
	Too acid	0.97				
88C:						
Sparta	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Slope	0.96
	Low content of organic matter	0.68				
	Too acid	0.74				
88E:						
Sparta	Poor		Fair		Poor	
	Too sandy	0.00	Slope	0.98	Too sandy	0.00
	Wind erosion	0.00			Slope	0.00
	Low content of organic matter	0.12				
	Droughty	0.69				
	Too acid	0.97				
98A:						
Ade	Poor		Good		Poor	
	Wind erosion	0.00			Too sandy	0.00
	Too sandy	0.00				
	Low content of organic matter	0.68				
	Too acid	0.74				
98B:						
Ade	Poor		Good		Poor	
	Wind erosion	0.00			Too sandy	0.00
	Too sandy	0.00				
	Low content of organic matter	0.68				
	Too acid	0.74				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
98D:						
Ade	Poor		Good		Poor	
	Wind erosion	0.00			Too sandy	0.00
	Too sandy	0.00			Slope	0.63
	Low content of organic matter	0.68				
	Too acid	0.74				
125A:						
Selma	Fair		Poor		Poor	
	Low content of organic matter	0.98	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.78		
			Shrink-swell	0.99		
134A:						
Camden	Fair		Good		Fair	
	Low content of organic matter	0.12			Too clayey	0.49
	Water erosion	0.68				
	Too clayey	0.82				
	Too acid	0.97				
134B:						
Camden	Fair		Good		Fair	
	Low content of organic matter	0.12			Too clayey	0.49
	Water erosion	0.68				
	Too clayey	0.82				
	Too acid	0.97				
134C2:						
Camden	Fair		Good		Fair	
	Low content of organic matter	0.12			Too clayey	0.49
	Too clayey	0.82				
	Water erosion	0.90				
	Too acid	0.97				
152A:						
Drummer	Fair		Poor		Poor	
	Low content of organic matter	0.50	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Carbonate content	0.92	Low strength	0.00		
	Water erosion	0.99	Shrink-swell	0.99		
172A:						
Hoopeston	Fair		Fair		Fair	
	Low content of organic matter	0.68	Depth to saturated zone	0.14	Depth to saturated zone	0.14
	Too acid	0.97				
175B:						
Lamont	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.74				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
175C2:						
Lamont	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.74				
175D2:						
Lamont	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.04
	Too acid	0.74				
175D3:						
Lamont	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.04
	Too acid	0.74				
175F2:						
Lamont	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Too acid	0.74				
201A:						
Gilford	Fair		Poor		Poor	
	Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
224C2:						
Strawn	Fair		Fair		Fair	
	Low content of organic matter	0.24	Low strength	0.22	Carbonate content	0.97
	Carbonate content	0.97			Rock fragments	0.98
224D2:						
Strawn	Fair		Fair		Fair	
	Low content of organic matter	0.24	Low strength	0.22	Slope	0.04
	Carbonate content	0.97			Carbonate content	0.97
					Rock fragments	0.98
224D3:						
Strawn	Fair		Fair		Fair	
	Low content of organic matter	0.24	Low strength	0.22	Slope	0.04
	Carbonate content	0.97			Carbonate content	0.97
					Rock fragments	0.98
224F2:						
Strawn	Fair		Poor		Poor	
	Low content of organic matter	0.24	Slope	0.00	Slope	0.00
	Carbonate content	0.97	Low strength	0.22	Carbonate content	0.97
					Rock fragments	0.98
227B:						
Argyle	Fair		Good		Fair	
	Low content of organic matter	0.12			Rock fragments	0.01
	Too acid	0.74			Too clayey	0.57
	Water erosion	0.90			Hard to reclaim (rock fragments)	0.95
	Too clayey	0.98				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
227C2:						
Argyle	Fair		Good		Fair	
	Low content of organic matter	0.12			Rock fragments	0.01
	Too acid	0.74			Too clayey	0.57
	Too clayey	0.98			Hard to reclaim (rock fragments)	0.95
	Water erosion	0.99				
261A:						
Niota	Poor		Poor		Poor	
	Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.12	Shrink-swell	0.92	Too clayey	0.00
	Too acid	0.20			Too acid	0.76
	Water erosion	0.90				
268B:						
Mt. Carroll	Fair		Poor		Good	
	Low content of organic matter	0.24	Low strength	0.00		
	Too acid	0.84				
	Water erosion	0.90				
268C2:						
Mt. Carroll	Fair		Poor		Good	
	Low content of organic matter	0.24	Low strength	0.00		
	Water erosion	0.68				
	Too acid	0.84				
272A:						
Edgington	Fair		Poor		Poor	
	Too acid	0.54	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Water erosion	0.90	Low strength	0.00		
274B:						
Seaton	Fair		Poor		Good	
	Low content of organic matter	0.88	Low strength	0.00		
	Too acid	0.88				
	Water erosion	0.90				
	Carbonate content	0.97				
274C:						
Seaton	Fair		Poor		Good	
	Low content of organic matter	0.88	Low strength	0.00		
	Too acid	0.88				
	Water erosion	0.90				
	Carbonate content	0.97				
274C2:						
Seaton	Fair		Poor		Good	
	Low content of organic matter	0.88	Low strength	0.00		
	Too acid	0.88				
	Water erosion	0.90				
	Carbonate content	0.97				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
274D2:						
Seaton	Fair		Poor		Fair	
	Low content of organic matter	0.88	Low strength	0.00	Slope	0.04
	Too acid	0.88				
	Water erosion	0.90				
	Carbonate content	0.97				
274D3:						
Seaton	Fair		Poor		Fair	
	Low content of organic matter	0.24	Low strength	0.00	Slope	0.04
	Too acid	0.88				
	Water erosion	0.90				
	Carbonate content	0.97				
274E2:						
Seaton	Fair		Poor		Poor	
	Low content of organic matter	0.88	Low strength	0.00	Slope	0.00
	Too acid	0.88	Slope	0.24		
	Water erosion	0.90				
	Carbonate content	0.97				
274F:						
Seaton	Fair		Poor		Poor	
	Low content of organic matter	0.88	Slope	0.00	Slope	0.00
	Too acid	0.88	Low strength	0.00		
	Water erosion	0.90				
	Carbonate content	0.97				
275A:						
Joy	Fair		Poor		Fair	
	Low content of organic matter	0.60	Low strength	0.00	Depth to saturated zone	0.14
	Water erosion	0.90	Depth to saturated zone	0.14		
	Too acid	0.97				
275B:						
Joy	Fair		Poor		Fair	
	Low content of organic matter	0.60	Low strength	0.00	Depth to saturated zone	0.14
	Water erosion	0.90	Depth to saturated zone	0.14		
	Too acid	0.97				
277B:						
Port Byron	Fair		Poor		Good	
	Low content of organic matter	0.24	Low strength	0.00		
	Water erosion	0.90				
	Too acid	0.97				
277C:						
Port Byron	Fair		Poor		Good	
	Low content of organic matter	0.24	Low strength	0.00		
	Water erosion	0.90				
	Too acid	0.97				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
277C2:						
Port Byron	Fair		Poor		Good	
	Low content of organic matter	0.24	Low strength	0.00		
	Water erosion	0.90				
279A:						
Rozetta	Fair		Poor		Fair	
	Low content of organic matter	0.24	Low strength	0.00	Too clayey	0.60
	Water erosion	0.68	Shrink-swell	0.96		
	Too acid	0.68				
	Too clayey	0.98				
279B:						
Rozetta	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.57
	Water erosion	0.68	Shrink-swell	0.92		
	Too acid	0.68				
	Too clayey	0.98				
280B:						
Fayette	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.64
	Water erosion	0.68	Shrink-swell	0.87		
	Too acid	0.68				
	Too clayey	0.98				
280C:						
Fayette	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.64
	Water erosion	0.68	Shrink-swell	0.87		
	Too acid	0.68				
	Too clayey	0.98				
280C2:						
Fayette	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.57
	Too acid	0.68	Shrink-swell	0.87		
	Water erosion	0.90				
	Too clayey	0.98				
280C3:						
Fayette	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.57
	Too acid	0.68	Shrink-swell	0.87		
	Too clayey	0.98				
	Water erosion	0.99				
280D2:						
Fayette	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.04
	Too acid	0.68	Shrink-swell	0.87	Too clayey	0.57
	Water erosion	0.90				
	Too clayey	0.98				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
280D3:						
Fayette	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.04
	Water erosion	0.68	Shrink-swell	0.87	Too clayey	0.57
	Too acid	0.68				
	Too clayey	0.98				
280F2:						
Fayette	Fair		Poor		Poor	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.00
	Too acid	0.68	Slope	0.00	Too clayey	0.57
	Water erosion	0.90	Shrink-swell	0.87		
	Too clayey	0.98				
280G2:						
Fayette	Fair		Poor		Poor	
	Low content of organic matter	0.50	Slope	0.00	Slope	0.00
	Water erosion	0.68	Low strength	0.00	Too clayey	0.64
	Too acid	0.68	Shrink-swell	0.87		
	Too clayey	0.98				
403E2:						
Elizabeth	Poor		Poor		Poor	
	Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
	Depth to bedrock	0.00	Slope	0.05	Slope	0.00
	Carbonate content	0.92	Low strength	0.22	Rock fragments	0.76
			Shrink-swell	0.87		
410C2:						
Woodbine	Fair		Poor		Fair	
	Low content of organic matter	0.24	Low strength	0.00	Too clayey	0.60
	Too acid	0.68	Depth to bedrock	0.58		
	Water erosion	0.90	Shrink-swell	0.85		
	Too clayey	0.98				
410D2:						
Woodbine	Fair		Poor		Fair	
	Low content of organic matter	0.68	Low strength	0.00	Slope	0.04
	Water erosion	0.90	Depth to bedrock	0.58		
	Too acid	0.92	Shrink-swell	0.88		
410D3:						
Woodbine	Fair		Poor		Fair	
	Low content of organic matter	0.24	Low strength	0.00	Slope	0.04
	Too acid	0.68	Depth to bedrock	0.58	Too clayey	0.60
	Too clayey	0.98	Shrink-swell	0.93		
	Water erosion	0.99				
410F2:						
Woodbine	Fair		Poor		Poor	
	Low content of organic matter	0.24	Slope	0.00	Slope	0.00
	Too acid	0.68	Low strength	0.00	Too clayey	0.60
	Water erosion	0.90	Depth to bedrock	0.58		
	Too clayey	0.98	Shrink-swell	0.94		

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
410G2:						
Woodbine	Fair		Poor		Poor	
	Low content of organic matter	0.24	Slope	0.00	Slope	0.00
	Too acid	0.68	Low strength	0.00	Too clayey	0.60
	Water erosion	0.90	Depth to bedrock	0.58		
	Too clayey	0.98	Shrink-swell	0.88		
411B:						
Ashdale	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.54
	Too clayey	0.82	Depth to bedrock	0.58		
	Too acid	0.84	Shrink-swell	0.93		
	Water erosion	0.99				
411C2:						
Ashdale	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.54
	Too clayey	0.82	Depth to bedrock	0.58		
	Too acid	0.84	Shrink-swell	0.87		
	Water erosion	0.99				
412B:						
Ogle	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.64
	Too acid	0.74	Shrink-swell	0.94		
	Too clayey	0.98				
	Water erosion	0.99				
412C2:						
Ogle	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.64
	Too acid	0.74	Shrink-swell	0.87		
	Too clayey	0.98				
	Water erosion	0.99				
412C3:						
Ogle	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.64
	Too acid	0.74	Shrink-swell	0.87		
	Too clayey	0.98				
	Water erosion	0.99				
414B:						
Myrtle	Fair		Poor		Fair	
	Too acid	0.54	Low strength	0.00	Too clayey	0.67
	Low content of organic matter	0.68	Shrink-swell	0.91	Too acid	0.98
	Water erosion	0.90				
	Too clayey	0.98				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
414C2:						
Myrtle	Fair		Poor		Fair	
	Too acid	0.54	Low strength	0.00	Too clayey	0.67
	Low content of organic matter	0.68	Shrink-swell	0.87	Too acid	0.98
	Too clayey	0.98				
	Water erosion	0.99				
416C2:						
Durand	Fair		Fair		Fair	
	Low content of organic matter	0.02	Shrink-swell	0.87	Rock fragments	0.50
	Too acid	0.84			Too clayey	0.52
	Too clayey	0.98				
	Water erosion	0.99				
416C3:						
Durand	Fair		Poor		Fair	
	Low content of organic matter	0.02	Low strength	0.00	Rock fragments	0.50
	Too acid	0.84	Shrink-swell	0.87	Too clayey	0.52
	Water erosion	0.90				
	Too clayey	0.98				
417D3:						
Derinda	Poor		Poor		Poor	
	Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
	Low content of organic matter	0.18	Low strength	0.00	Slope	0.04
	Depth to bedrock	0.58	Shrink-swell	0.87	Depth to bedrock	0.58
	Droughty	0.81	Depth to saturated zone	0.99	Rock fragments	0.98
	Water erosion	0.90			Depth to saturated zone	0.99
	Too acid	0.95				
417E2:						
Derinda	Fair		Poor		Poor	
	Too clayey	0.18	Depth to bedrock	0.00	Slope	0.00
	Depth to bedrock	0.58	Low strength	0.00	Too clayey	0.13
	Low content of organic matter	0.88	Slope	0.24	Depth to bedrock	0.58
	Water erosion	0.90	Shrink-swell	0.92	Depth to saturated zone	0.99
	Too acid	0.95	Depth to saturated zone	0.99		
419B:						
Flagg	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.57
	Too acid	0.54	Shrink-swell	0.97	Too acid	0.98
	Water erosion	0.68				
	Too clayey	0.98				
419C2:						
Flagg	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.57
	Too acid	0.54	Shrink-swell	0.99	Too acid	0.98
	Water erosion	0.90				
	Too clayey	0.98				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
419D2:						
Flagg	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.04
	Too acid	0.54			Too clayey	0.57
	Water erosion	0.90			Too acid	0.98
	Too clayey	0.98				
419D3:						
Flagg	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Slope	0.04
	Too acid	0.54			Too clayey	0.57
	Too clayey	0.98			Too acid	0.98
	Water erosion	0.99				
429C2:						
Palsgrove	Fair		Poor		Fair	
	Low content of organic matter	0.75	Low strength	0.00	Too clayey	0.68
	Water erosion	0.90	Depth to bedrock	0.58		
	Too acid	0.97	Shrink-swell	0.76		
	Too clayey	0.98				
505D2:						
Dunbarton	Poor		Poor		Poor	
	Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
	Droughty	0.01	Low strength	0.00	Rock fragments	0.50
	Water erosion	0.90	Shrink-swell	0.67	Too clayey	0.87
	Too clayey	0.92			Slope	0.96
505D3:						
Dunbarton	Poor		Poor		Poor	
	Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
	Depth to bedrock	0.00	Low strength	0.00	Rock fragments	0.50
	Low content of organic matter	0.12	Shrink-swell	0.12	Too clayey	0.53
	Water erosion	0.90			Slope	0.96
	Too clayey	0.92				
505E2:						
Dunbarton	Poor		Poor		Poor	
	Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
	Depth to bedrock	0.00	Low strength	0.00	Depth to bedrock	0.00
	Droughty	0.00	Shrink-swell	0.12	Slope	0.00
	Low content of organic matter	0.03	Slope	0.98	Rock fragments	0.50
	Water erosion	0.90				
505E3:						
Dunbarton	Poor		Poor		Poor	
	Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
	Depth to bedrock	0.00	Low strength	0.00	Slope	0.00
	Low content of organic matter	0.12	Shrink-swell	0.12	Rock fragments	0.50
	Water erosion	0.90	Slope	0.98	Too clayey	0.53
	Too clayey	0.92				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
505F2:						
Dunbarton	Poor		Poor		Poor	
	Too clayey	0.00	Depth to bedrock	0.00	Slope	0.00
	Depth to bedrock	0.00	Low strength	0.00	Too clayey	0.00
	Droughty	0.00	Slope	0.00	Depth to bedrock	0.00
	Low content of organic matter	0.03	Shrink-swell	0.12	Rock fragments	0.50
	Water erosion	0.90				
505G:						
Dunbarton	Poor		Poor		Poor	
	Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
	Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
	Low content of organic matter	0.12	Low strength	0.00	Rock fragments	0.50
	Water erosion	0.90	Shrink-swell	0.12	Too clayey	0.53
	Too clayey	0.92				
506C2:						
Hitt	Fair		Poor		Fair	
	Low content of organic matter	0.08	Low strength	0.00	Too clayey	0.52
	Too acid	0.74	Depth to bedrock	0.58		
	Too clayey	0.92	Shrink-swell	0.99		
	Water erosion	0.99				
506C3:						
Hitt	Fair		Poor		Fair	
	Low content of organic matter	0.08	Low strength	0.00	Too clayey	0.52
	Too acid	0.74	Depth to bedrock	0.58		
	Too clayey	0.92	Shrink-swell	0.99		
	Water erosion	0.99				
546C2:						
Keltner	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.64
	Too clayey	0.98	Depth to bedrock	0.58	Depth to saturated zone	0.89
	Water erosion	0.99	Depth to saturated zone	0.89		
			Shrink-swell	0.98		
547C2:						
Eleroy	Fair		Poor		Fair	
	Low content of organic matter	0.88	Low strength	0.00	Too clayey	0.66
	Water erosion	0.90	Depth to bedrock	0.58	Depth to saturated zone	0.98
	Too clayey	0.92	Shrink-swell	0.89		
			Depth to saturated zone	0.98		
547D2:						
Eleroy	Fair		Poor		Fair	
	Low content of organic matter	0.88	Low strength	0.00	Slope	0.04
	Water erosion	0.90	Depth to bedrock	0.58	Too clayey	0.66
	Too clayey	0.92	Shrink-swell	0.94	Depth to saturated zone	0.98
			Depth to saturated zone	0.98		

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
564B:						
Waukegan	Fair		Good		Good	
	Low content of organic matter	0.02				
	Water erosion	0.90				
	Too acid	0.97				
564C2:						
Waukegan	Fair		Good		Good	
	Low content of organic matter	0.02				
	Too acid	0.97				
	Water erosion	0.99				
565B:						
Tell	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.84				
	Water erosion	0.90				
565C2:						
Tell	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.84				
	Water erosion	0.90				
565D2:						
Tell	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.04
	Too acid	0.84				
	Water erosion	0.90				
565D3:						
Tell	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.04
	Too acid	0.84				
	Water erosion	0.90				
565F2:						
Tell	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Too acid	0.84				
	Water erosion	0.90				
569F2:						
Medary	Fair		Poor		Poor	
	Too clayey	0.08	Low strength	0.00	Slope	0.00
	Low content of organic matter	0.12	Slope	0.00	Too clayey	0.05
	Too acid	0.54	Shrink-swell	0.12	Depth to saturated zone	0.96
	Water erosion	0.90	Depth to saturated zone	0.96		

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
572C2:						
Loran	Fair		Poor		Fair	
	Water erosion	0.99	Low strength	0.00	Depth to saturated zone	0.53
			Depth to saturated zone	0.53		
			Depth to bedrock	0.58		
			Shrink-swell	0.87		
576A:						
Zwingle	Poor		Poor		Poor	
	Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.00
	Too acid	0.68	Shrink-swell	0.69		
	Water erosion	0.99				
576B:						
Zwingle	Poor		Poor		Poor	
	Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.00
	Too acid	0.68	Shrink-swell	0.57		
576C:						
Zwingle	Poor		Poor		Poor	
	Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.00
	Too acid	0.68	Shrink-swell	0.57		
660D2:						
Coatsburg	Poor		Poor		Poor	
	Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.00
	Too acid	0.84	Shrink-swell	0.28	Slope	0.04
660D3:						
Coatsburg	Poor		Poor		Poor	
	Too clayey	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.00
	Too acid	0.84	Shrink-swell	0.29	Slope	0.04
675A:						
Greenbush	Fair		Poor		Fair	
	Low content of organic matter	0.88	Low strength	0.00	Too clayey	0.70
			Shrink-swell	0.93		
	Water erosion	0.90				
	Too acid	0.97				
	Too clayey	0.98				
675B:						
Greenbush	Fair		Poor		Fair	
	Low content of organic matter	0.88	Low strength	0.00	Too clayey	0.70
			Shrink-swell	0.91		
	Too acid	0.97				
	Too clayey	0.98				
	Water erosion	0.99				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
675C:						
Greenbush	Fair				Fair	
	Low content of organic matter	0.88			Too clayey	0.70
	Too acid	0.97				
	Too clayey	0.98				
	Water erosion	0.99				
675C2:						
Greenbush	Fair		Poor		Fair	
	Low content of organic matter	0.88	Low strength	0.00	Too clayey	0.70
			Shrink-swell	0.87		
	Too acid	0.97				
	Too clayey	0.98				
	Water erosion	0.99				
689B:						
Coloma	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00				
	Low content of organic matter	0.12				
	Droughty	0.36				
	Too acid	0.88				
689D:						
Coloma	Poor		Good		Poor	
	Wind erosion	0.00			Too sandy	0.00
	Too sandy	0.00			Slope	0.63
	Low content of organic matter	0.12				
	Droughty	0.31				
	Too acid	0.88				
689F:						
Coloma	Poor		Poor		Poor	
	Wind erosion	0.00	Slope	0.00	Slope	0.00
	Too sandy	0.00			Too sandy	0.00
	Low content of organic matter	0.12				
	Droughty	0.31				
	Too acid	0.88				
735D2:						
Casco	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Low content of organic matter	0.12			Rock fragments	0.00
	Droughty	0.21			Hard to reclaim (rock fragments)	0.00
					Slope	0.84
Rodman	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Droughty	0.00			Rock fragments	0.00
	Low content of organic matter	0.12			Hard to reclaim (rock fragments)	0.00
	Carbonate content	0.46			Carbonate content	0.46
					Slope	0.84

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
735D2:						
Fox	Fair		Fair		Poor	
	Low content of organic matter	0.12	Shrink-swell	0.99	Hard to reclaim (rock fragments)	0.00
	Water erosion	0.68			Too clayey	0.53
	Carbonate content	0.68			Slope	0.84
	Too clayey	0.92				
735E2:						
Casco	Poor		Fair		Poor	
	Too sandy	0.00	Slope	0.98	Too sandy	0.00
	Droughty	0.11			Slope	0.00
	Low content of organic matter	0.12			Rock fragments	0.00
					Hard to reclaim (rock fragments)	0.00
Rodman	Poor		Fair		Poor	
	Too sandy	0.00	Slope	0.98	Too sandy	0.00
	Droughty	0.00			Rock fragments	0.00
	Low content of organic matter	0.12			Slope	0.00
	Carbonate content	0.46			Hard to reclaim (rock fragments)	0.00
					Carbonate content	0.46
Fox	Fair		Fair		Poor	
	Low content of organic matter	0.12	Slope	0.98	Slope	0.00
	Carbonate content	0.68	Shrink-swell	0.99	Hard to reclaim (rock fragments)	0.00
	Water erosion	0.90			Too clayey	0.53
	Too clayey	0.92				
764B:						
Coyne	Good		Good		Good	
785G:						
Lacrescent	Fair		Poor		Poor	
	Cobble content	0.34	Slope	0.00	Slope	0.00
	Water erosion	0.90	Cobble content	0.00	Hard to reclaim (rock fragments)	0.00
	Droughty	0.99			Rock fragments	0.00
798C2:						
Fayette	Fair		Poor		Fair	
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.57
	Too acid	0.68	Shrink-swell	0.87		
	Water erosion	0.90				
	Too clayey	0.98				
Gale	Fair		Poor		Fair	
	Depth to bedrock	0.29	Depth to bedrock	0.00	Depth to bedrock	0.29
	Too acid	0.54	Low strength	0.00		
	Droughty	0.59	Shrink-swell	0.99		
	Water erosion	0.90				
802B:						
Orthents	Fair		Poor		Good	
	Low content of organic matter	0.68	Low strength	0.00		
	Water erosion	0.90	Shrink-swell	0.87		

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
835G:						
Earthen dam	Not rated		Not rated		Not rated	
862:						
Pits, sand	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	
865:						
Pits, gravel	Not rated		Not rated		Not rated	
905F:						
NewGlarus	Fair		Poor		Poor	
	Depth to bedrock	0.58	Depth to bedrock	0.00	Slope	0.00
	Low content of organic matter	0.88	Low strength	0.00	Depth to bedrock	0.58
	Droughty	0.96	Slope	0.00	Too clayey	0.70
	Too clayey	0.98	Shrink-swell	0.59		
	Water erosion	0.99				
Lamoille	Poor		Poor		Poor	
	Too clayey	0.00	Slope	0.00	Slope	0.00
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
	Water erosion	0.68	Shrink-swell	0.87	Hard to reclaim (rock fragments)	0.00
	Too acid	0.88			Rock fragments	0.00
905G:						
NewGlarus	Fair		Poor		Poor	
	Depth to bedrock	0.58	Depth to bedrock	0.00	Slope	0.00
	Low content of organic matter	0.88	Slope	0.00	Depth to bedrock	0.58
	Droughty	0.96	Low strength	0.00	Too clayey	0.70
	Too clayey	0.98	Shrink-swell	0.59		
	Water erosion	0.99				
Lamoille	Poor		Poor		Poor	
	Too clayey	0.00	Slope	0.00	Slope	0.00
	Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
	Water erosion	0.68	Shrink-swell	0.87	Hard to reclaim (rock fragments)	0.00
	Too acid	0.88			Rock fragments	0.00
928C2:						
NewGlarus	Fair		Poor		Fair	
	Depth to bedrock	0.58	Depth to bedrock	0.00	Depth to bedrock	0.58
	Low content of organic matter	0.88	Low strength	0.00	Too clayey	0.70
	Too clayey	0.98	Shrink-swell	0.67		
	Droughty	0.99				
	Water erosion	0.99				
Palsgrove	Fair		Poor		Fair	
	Low content of organic matter	0.75	Low strength	0.00	Too clayey	0.68
	Water erosion	0.90	Depth to bedrock	0.58		
	Too acid	0.97	Shrink-swell	0.76		
	Too clayey	0.98				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
928D2:						
NewGlarus	Fair		Poor		Fair	
	Depth to bedrock	0.58	Depth to bedrock	0.00	Slope	0.04
	Low content of organic matter	0.88	Low strength	0.00	Depth to bedrock	0.58
	Too clayey	0.98	Shrink-swell	0.67	Too clayey	0.70
	Droughty	0.99				
	Water erosion	0.99				
Palsgrove	Fair		Poor		Fair	
	Low content of organic matter	0.75	Low strength	0.00	Slope	0.04
	Water erosion	0.90	Depth to bedrock	0.58	Too clayey	0.68
	Too acid	0.97	Shrink-swell	0.83		
	Too clayey	0.98				
943F2:						
Seaton	Fair		Poor		Poor	
	Low content of organic matter	0.88	Slope	0.00	Slope	0.00
	Too acid	0.88	Low strength	0.00		
	Water erosion	0.90				
Timula	Fair		Poor		Poor	
	Low content of organic matter	0.24	Slope	0.00	Slope	0.00
	Water erosion	0.37				
	Carbonate content	0.92				
943G2:						
Seaton	Fair		Poor		Poor	
	Low content of organic matter	0.88	Slope	0.00	Slope	0.00
	Too acid	0.88	Low strength	0.00		
	Water erosion	0.90				
Timula	Fair		Poor		Poor	
	Low content of organic matter	0.24	Slope	0.00	Slope	0.00
	Water erosion	0.37				
	Carbonate content	0.92				
952C2:						
Tell	Fair		Good		Fair	
	Too sandy	0.01			Too sandy	0.01
	Low content of organic matter	0.12				
	Too acid	0.84				
	Water erosion	0.90				
Lamont	Fair		Good		Good	
	Low content of organic matter	0.12				
	Too acid	0.74				
952D2:						
Tell	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.04
	Too acid	0.84				
	Water erosion	0.90				

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
952D2:						
Lamont	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.04
	Too acid	0.74				
952D3:						
Tell	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.04
	Too acid	0.84				
	Water erosion	0.90				
Lamont	Fair		Good		Fair	
	Low content of organic matter	0.12			Slope	0.04
	Too acid	0.74				
952F2:						
Tell	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Too acid	0.84				
	Water erosion	0.90				
Lamont	Fair		Poor		Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Too acid	0.74				
1076A:						
Otter	Fair		Poor		Poor	
	Water erosion	0.68	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.78		
1082A:						
Millington	Fair		Poor		Poor	
	Carbonate content	0.92	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.00		
			Shrink-swell	0.95		
1107A:						
Sawmill	Fair		Poor		Poor	
	Too clayey	0.98	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.00	Too clayey	0.98
			Shrink-swell	0.87		
1239A:						
Dorchester	Fair		Poor		Poor	
	Water erosion	0.68	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Carbonate content	0.97	Low strength	0.00		
			Shrink-swell	0.87		

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1451A:						
Lawson	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Depth to saturated zone	0.14
	Water erosion	0.68	Depth to saturated zone	0.14		
3076A:						
Otter	Good		Poor		Poor	
			Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.00		
3082A:						
Millington	Fair		Poor		Poor	
	Carbonate content	0.92	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.00		
			Shrink-swell	0.95		
3107+:						
Sawmill	Fair		Poor		Poor	
	Too clayey	0.98	Low strength	0.00	Depth to saturated zone	0.00
			Depth to saturated zone	0.00	Too clayey	0.93
			Shrink-swell	0.89		
3107A:						
Sawmill	Fair		Poor		Poor	
	Too clayey	0.98	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.00	Too clayey	0.98
			Shrink-swell	0.87		
3333A:						
Wakeland	Fair		Fair		Fair	
	Water erosion	0.37	Depth to saturated zone	0.04	Depth to saturated zone	0.04
	Low content of organic matter	0.50				
3415A:						
Orion	Fair		Poor		Fair	
	Water erosion	0.37	Low strength	0.00	Depth to saturated zone	0.14
			Depth to saturated zone	0.14		
3451A:						
Lawson	Fair		Poor		Fair	
	Low content of organic matter	0.50	Low strength	0.00	Depth to saturated zone	0.14
	Water erosion	0.68	Depth to saturated zone	0.14		
3579A:						
Beavercreek	Fair		Fair		Poor	
	Low content of organic matter	0.12	Cobble content	0.79	Rock fragments	0.00
	Droughty	0.98			Hard to reclaim (rock fragments)	0.00

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3646L:						
Fluvaquents	Fair		Poor		Poor	
	Water erosion	0.68	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.88	Low strength	0.00		
			Shrink-swell	0.99		
7076A:						
Otter	Fair		Poor		Poor	
	Water erosion	0.68	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.00		
7082A:						
Millington	Fair		Poor		Poor	
	Carbonate content	0.92	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Too clayey	0.98	Shrink-swell	0.87	Carbonate content	0.97
					Too clayey	0.98
7100A:						
Palms	Not rated		Poor		Not rated	
	Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
	Low content of organic matter	0.00	Low strength	0.22	High content of organic matter	0.00
7107+:						
Sawmill	Good		Poor		Poor	
			Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.00		
			Shrink-swell	0.87		
7107A:						
Sawmill	Fair		Poor		Poor	
	Too clayey	0.98	Depth to saturated zone	0.00	Depth to saturated zone	0.00
			Low strength	0.00	Too clayey	0.93
			Shrink-swell	0.87		
7415A:						
Orion	Fair		Poor		Fair	
	Water erosion	0.37	Low strength	0.00	Depth to saturated zone	0.14
			Depth to saturated zone	0.14		
7451A:						
Lawson	Fair		Poor		Fair	
	Water erosion	0.68	Low strength	0.00	Depth to saturated zone	0.14
			Depth to saturated zone	0.14		
7452A:						
Riley	Fair		Fair		Fair	
	Low content of organic matter	0.02	Depth to saturated zone	0.12	Depth to saturated zone	0.12
	Too clayey	0.98			Too clayey	0.81

Table 16b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
8077A:						
Huntsville	Good		Fair		Good	
			Shrink-swell	0.93		
8239A:						
Dorchester	Fair		Poor		Good	
	Water erosion	0.68	Low strength	0.00		
	Carbonate content	0.97	Shrink-swell	0.87		
8239B:						
Dorchester	Fair		Poor		Good	
	Water erosion	0.68	Low strength	0.00		
	Carbonate content	0.97	Shrink-swell	0.87		

Table 17a.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.03	No ground water	1.00
21C2:						
Pecatonica	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.01	No ground water	1.00
21C3:						
Pecatonica	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
21D2:						
Pecatonica	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.01	No ground water	1.00
	Slope	0.02				
21D3:						
Pecatonica	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
	Slope	0.02				
21F2:						
Pecatonica	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.02	No ground water	1.00
	Slope	0.34				
29D3:						
Dubuque	Somewhat limited		Somewhat limited		Very limited	
	Depth to bedrock	0.95	Thin layer	0.95	No ground water	1.00
	Seepage	0.72				
	Slope	0.02				
37A:						
Worthen	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.68	No ground water	1.00
37B:						
Worthen	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.68	No ground water	1.00
37C:						
Worthen	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.68	No ground water	1.00
51A:						
Muscatune	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
			Piping	0.18	Cutbanks cave	0.10

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51B:						
Muscatune	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.34		
61A:						
Atterberry	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.03		
61B:						
Atterberry	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.01		
68A:						
Sable	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Ponding	1.00		
68A+:						
Sable	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Ponding	1.00		
81A:						
Littleton	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.82		
81B:						
Littleton	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.82		
86A:						
Osco	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.02	No ground water	1.00
86B:						
Osco	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.03	No ground water	1.00
86C:						
Osco	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.03	No ground water	1.00
86C2:						
Osco	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.01	No ground water	1.00
86C3:						
Osco	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
87A:						
Dickinson	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.67	No ground water	1.00
87B:						
Dickinson	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.67	No ground water	1.00
87C2:						
Dickinson	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.67	No ground water	1.00
88A:						
Sparta	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.76	No ground water	1.00
88B:						
Sparta	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.76	No ground water	1.00
88C:						
Sparta	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.76	No ground water	1.00
88E:						
Sparta	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.36	No ground water	1.00
	Slope	0.04				
98A:						
Ade	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.10	No ground water	1.00
98B:						
Ade	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.58	No ground water	1.00
98D:						
Ade	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.10	No ground water	1.00
	Slope	0.01				
125A:						
Selma	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Ponding	1.00		
			Piping	0.94		
			Seepage	0.06		
134A:						
Camden	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Piping	0.93	No ground water	1.00
			Seepage	0.08		
134B:						
Camden	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Piping	0.98	No ground water	1.00
			Seepage	0.08		

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
134C2:						
Camden	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	No ground water	1.00
			Seepage	0.08		
152A:						
Drummer	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Ponding	1.00	Slow refill	0.28
172A:						
Hoopeston	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.22		
175B:						
Lamont	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.19	No ground water	1.00
175C2:						
Lamont	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.19	No ground water	1.00
175D2:						
Lamont	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.19	No ground water	1.00
	Slope	0.02				
175D3:						
Lamont	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.19	No ground water	1.00
	Slope	0.02				
175F2:						
Lamont	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.19	No ground water	1.00
	Slope	0.34				
201A:						
Gilford	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Ponding	1.00		
			Seepage	0.22		
224C2:						
Strawn	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.04	No ground water	1.00
224D2:						
Strawn	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.06	No ground water	1.00
	Slope	0.02				
224D3:						
Strawn	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.01	No ground water	1.00
	Slope	0.02				

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
224F2:						
Strawn	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.04	No ground water	1.00
	Slope	0.34				
227B:						
Argyle	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Seepage	0.17	No ground water	1.00
			Piping	0.05		
227C2:						
Argyle	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Seepage	0.17	No ground water	1.00
261A:						
Niota	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Ponding	1.00		
			Piping	0.48		
			Seepage	0.06		
268B:						
Mt. Carroll	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.50	No ground water	1.00
268C2:						
Mt. Carroll	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.61	No ground water	1.00
272A:						
Edgington	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
			Ponding	1.00	Cutbanks cave	0.10
			Piping	0.68		
274B:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.90	No ground water	1.00
274C:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.90	No ground water	1.00
274C2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.90	No ground water	1.00
274D2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.91	No ground water	1.00
	Slope	0.02				
274D3:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.90	No ground water	1.00
	Slope	0.02				

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
274E2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.91	No ground water	1.00
	Slope	0.17				
274F:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.91	No ground water	1.00
	Slope	0.34				
275A:						
Joy	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.73		
275B:						
Joy	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.73		
277B:						
Port Byron	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.90	No ground water	1.00
277C:						
Port Byron	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.79	No ground water	1.00
277C2:						
Port Byron	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.88	No ground water	1.00
279A:						
Rozetta	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.03	No ground water	1.00
279B:						
Rozetta	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.01	No ground water	1.00
280B:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.21	No ground water	1.00
280C:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.21	No ground water	1.00
280C2:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.03	No ground water	1.00
280C3:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.02	No ground water	1.00

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
280D2:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.03	No ground water	1.00
	Slope	0.02				
280D3:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.08	No ground water	1.00
	Slope	0.02				
280F2:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.03	No ground water	1.00
	Slope	0.34				
280G2:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.99	Piping	0.17	No ground water	1.00
	Seepage	0.72				
403E2:						
Elizabeth	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Thin layer	1.00	No ground water	1.00
	Slope	0.23	Piping	0.42		
	Seepage	0.02				
410C2:						
Woodbine	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10				
410D2:						
Woodbine	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10	Piping	0.01		
	Slope	0.02				
410D3:						
Woodbine	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10				
	Slope	0.02				
410F2:						
Woodbine	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Slope	0.34	Piping	0.01		
	Depth to bedrock	0.10				
410G2:						
Woodbine	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.99	Thin layer	0.11	No ground water	1.00
	Seepage	0.72				
	Depth to bedrock	0.10				
411B:						
Ashdale	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10				

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
411C2:						
Ashdale	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10				
412B:						
Ogle	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
412C2:						
Ogle	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
412C3:						
Ogle	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
414B:						
Myrtle	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
414C2:						
Myrtle	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
416C2:						
Durand	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
416C3:						
Durand	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
417D3:						
Derinda	Somewhat limited		Somewhat limited		Very limited	
	Depth to bedrock	0.11	Thin layer	0.85	Slow refill	1.00
	Slope	0.02	Depth to saturated zone	0.53	Depth to water	0.21
					Cutbanks cave	0.10
417E2:						
Derinda	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.17	Thin layer	0.85	Slow refill	1.00
	Depth to bedrock	0.11	Depth to saturated zone	0.53	Depth to water	0.21
					Cutbanks cave	0.10
419B:						
Flagg	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
419C2:						
Flagg	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
419D2:						
Flagg	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
	Slope	0.02				

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
419D3:						
Flagg	Somewhat limited		Not limited		Very limited	
	Seepage	0.72			No ground water	1.00
	Slope	0.02				
429C2:						
Palsgrove	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10				
505D2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Thin layer	1.00	No ground water	1.00
	Seepage	0.47	Hard to pack	0.01		
505D3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Thin layer	1.00	No ground water	1.00
	Seepage	0.47	Hard to pack	0.73		
505E2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Thin layer	1.00	No ground water	1.00
	Seepage	0.47	Hard to pack	0.27		
	Slope	0.04				
505E3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Thin layer	1.00	No ground water	1.00
	Seepage	0.47	Hard to pack	0.73		
	Slope	0.04				
505F2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Thin layer	1.00	No ground water	1.00
	Seepage	0.47	Hard to pack	0.22		
	Slope	0.38				
505G:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to bedrock	1.00	Thin layer	1.00	No ground water	1.00
	Slope	0.99	Hard to pack	0.51		
	Seepage	0.47				
506C2:						
Hitt	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10	Piping	0.01		
506C3:						
Hitt	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10				
546C2:						
Keltner	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Depth to saturated zone	0.86	No ground water	1.00
	Depth to bedrock	0.01	Piping	0.29		
			Thin layer	0.11		

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
547C2:						
Eleroy	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Depth to saturated zone	0.68	No ground water	1.00
	Depth to bedrock	0.01	Thin layer	0.11		
547D2:						
Eleroy	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Depth to saturated zone	0.68	No ground water	1.00
	Slope	0.02	Thin layer	0.11		
	Depth to bedrock	0.01				
564B:						
Waukegan	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	No ground water	1.00
			Seepage	0.97		
564C2:						
Waukegan	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.97	No ground water	1.00
565B:						
Tell	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	No ground water	1.00
			Seepage	0.09		
565C2:						
Tell	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	No ground water	1.00
			Seepage	0.09		
565D2:						
Tell	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.09	No ground water	1.00
	Slope	0.02				
565D3:						
Tell	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	No ground water	1.00
	Slope	0.02	Seepage	0.09		
565F2:						
Tell	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.09	No ground water	1.00
	Slope	0.34				
569F2:						
Medary	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.50	Depth to saturated zone	0.73	Slow refill	1.00
			Hard to pack	0.37	Depth to water	0.12
					Cutbanks cave	0.10
572C2:						
Loran	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
	Depth to bedrock	0.01	Thin layer	0.11	Cutbanks cave	0.10
					Depth to water	0.01

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
576A:						
Zwingle	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.10		
576B:						
Zwingle	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Hard to pack	0.22		
			Seepage	0.10		
576C:						
Zwingle	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.10		
660D2:						
Coatsburg	Somewhat limited		Very limited		Very limited	
	Slope	0.02	Depth to saturated zone	1.00	No ground water	1.00
			Hard to pack	0.73		
660D3:						
Coatsburg	Somewhat limited		Very limited		Very limited	
	Slope	0.02	Depth to saturated zone	1.00	No ground water	1.00
			Hard to pack	0.92		
675A:						
Greenbush	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.28	No ground water	1.00
675B:						
Greenbush	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.17	No ground water	1.00
					Slow refill	0.28
675C:						
Greenbush	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.08	No ground water	1.00
675C2:						
Greenbush	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.08	No ground water	1.00
689B:						
Coloma	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.97	No ground water	1.00
689D:						
Coloma	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.97	No ground water	1.00
	Slope	0.01				
689F:						
Coloma	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.97	No ground water	1.00
	Slope	0.28				

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
735D2:						
Casco	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.90	No ground water	1.00
Rodman	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.22	No ground water	1.00
Fox	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.31	No ground water	1.00
735E2:						
Casco	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.90	No ground water	1.00
	Slope	0.04				
Rodman	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.22	No ground water	1.00
	Slope	0.04				
Fox	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.31	No ground water	1.00
	Slope	0.04				
764B:						
Coyne	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.90	No ground water	1.00
785G:						
Lacrescent	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Content of large stones	0.31	No ground water	1.00
	Slope	0.93				
798C2:						
Fayette	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.03	No ground water	1.00
Gale	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Thin layer	0.93	No ground water	1.00
	Depth to bedrock	0.19	Piping	0.92		
			Seepage	0.87		
802B:						
Orthents	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.04	Piping	0.50	No ground water	1.00
835G:						
Earthen dam	Not rated		Not rated		Not rated	
862:						
Pits, sand	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	
865:						
Pits, gravel	Not rated		Not rated		Not rated	

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
905F:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Depth to bedrock	0.85	Thin layer	0.85	No ground water	1.00
	Seepage	0.54				
	Slope	0.34				
Lamoille	Somewhat limited		Not limited		Very limited	
	Slope	0.34			No ground water	1.00
	Seepage	0.04				
905G:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.99	Thin layer	0.85	No ground water	1.00
	Depth to bedrock	0.85				
	Seepage	0.54				
Lamoille	Somewhat limited		Not limited		Very limited	
	Slope	0.99			No ground water	1.00
	Seepage	0.04				
928C2:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Depth to bedrock	0.85	Thin layer	0.85	No ground water	1.00
	Seepage	0.54				
Palsgrove	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10				
928D2:						
NewGlarus	Somewhat limited		Somewhat limited		Very limited	
	Depth to bedrock	0.85	Thin layer	0.85	No ground water	1.00
	Seepage	0.54				
	Slope	0.02				
Palsgrove	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Thin layer	0.11	No ground water	1.00
	Depth to bedrock	0.10				
	Slope	0.02				
943F2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.90	No ground water	1.00
	Slope	0.36				
Timula	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Piping	1.00	No ground water	1.00
	Slope	0.36				
943G2:						
Seaton	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.99	Piping	0.88	No ground water	1.00
	Seepage	0.72				
Timula	Somewhat limited		Very limited		Very limited	
	Slope	0.99	Piping	1.00	No ground water	1.00
	Seepage	0.72				

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
952C2:						
Tell	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.09	No ground water	1.00
Lamont	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.19	No ground water	1.00
952D2:						
Tell	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.09	No ground water	1.00
	Slope	0.02				
Lamont	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.19	No ground water	1.00
	Slope	0.02				
952D3:						
Tell	Very limited		Very limited		Very limited	
	Seepage	1.00	Piping	1.00	No ground water	1.00
	Slope	0.02	Seepage	0.09		
Lamont	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.19	No ground water	1.00
	Slope	0.02				
952F2:						
Tell	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.09	No ground water	1.00
	Slope	0.34				
Lamont	Very limited		Somewhat limited		Very limited	
	Seepage	1.00	Seepage	0.19	No ground water	1.00
	Slope	0.34				
1076A:						
Otter	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Ponding	1.00		
			Piping	0.78		
1082A:						
Millington	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Ponding	1.00		
			Piping	0.76		
1107A:						
Sawmill	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Ponding	1.00		
1239A:						
Dorchester	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.64		

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1451A:						
Lawson	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.75		
3076A:						
Otter	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Ponding	1.00		
			Piping	0.75		
3082A:						
Millington	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.76		
3107+:						
Sawmill	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.02		
3107A:						
Sawmill	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Ponding	1.00	Slow refill	0.28
			Depth to saturated zone	1.00	Cutbanks cave	0.10
3333A:						
Wakeland	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	1.00		
3415A:						
Orion	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	Cutbanks cave	1.00
					Slow refill	0.28
			Piping	1.00		
3451A:						
Lawson	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.75		
3579A:						
Beavercreek	Very limited		Not limited		Very limited	
	Seepage	1.00			No ground water	1.00
3646L:						
Fluvaquents	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Ponding	1.00	Slow refill	0.28
			Depth to saturated zone	1.00	Cutbanks cave	0.10
			Piping	1.00		

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7076A:						
Otter	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Ponding	1.00		
			Piping	0.74		
7082A:						
Millington	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Ponding	1.00		
			Piping	0.60		
7100A:						
Palms	Very limited		Not rated		Somewhat limited	
	Seepage	1.00	Not rated		Cutbanks cave	0.10
			Depth to saturated zone	1.00		
			Ponding	1.00		
7107+:						
Sawmill	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
7107A:						
Sawmill	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Ponding	1.00		
7415A:						
Orion	Somewhat limited		Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	Cutbanks cave	1.00
					Slow refill	0.28
			Piping	1.00		
7451A:						
Lawson	Somewhat limited		Very limited		Somewhat limited	
	Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
					Cutbanks cave	0.10
			Piping	0.64		
7452A:						
Riley	Very limited		Very limited		Very limited	
	Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
			Seepage	0.26		
8077A:						
Huntsville	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.66	No ground water	1.00
					Slow refill	0.28
8239A:						
Dorchester	Somewhat limited		Somewhat limited		Very limited	
	Seepage	0.72	Piping	0.64	No ground water	1.00

Table 17a.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
8239B: Dorchester	Somewhat limited Seepage	0.72	Somewhat limited Piping	0.64	Very limited No ground water	1.00

Table 17b.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21B:						
Pecatonica	Somewhat limited Slope	0.26	Very limited Water erosion Slope	1.00 0.26	Not limited	
21C2:						
Pecatonica	Somewhat limited Slope	0.99	Very limited Water erosion Slope	1.00 0.99	Not limited	
21C3:						
Pecatonica	Somewhat limited Slope	0.99	Somewhat limited Slope Water erosion	0.99 0.50	Not limited	
21D2:						
Pecatonica	Very limited Slope	1.00	Very limited Water erosion Slope	1.00 1.00	Somewhat limited Slope	0.96
21D3:						
Pecatonica	Very limited Slope	1.00	Very limited Slope Water erosion	1.00 0.50	Somewhat limited Slope	0.96
21F2:						
Pecatonica	Very limited Slope	1.00	Very limited Water erosion Slope	1.00 1.00	Very limited Slope	1.00
29D3:						
Dubuque	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Water erosion Slope Depth to hard bedrock	1.00 1.00 1.00	Very limited Depth to hard bedrock Slope Too clayey	1.00 0.96 0.82
37A:						
Worthen	Not limited		Somewhat limited Water erosion	0.88	Not limited	
37B:						
Worthen	Somewhat limited Slope	0.26	Somewhat limited Water erosion Slope	0.88 0.26	Not limited	
37C:						
Worthen	Somewhat limited Slope	0.99	Somewhat limited Slope Water erosion	0.99 0.88	Not limited	

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51A:						
Muscatune	Not limited		Very limited Water erosion Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone	1.00
51B:						
Muscatune	Somewhat limited Slope	0.26	Very limited Water erosion Depth to saturated zone Slope	1.00 1.00 0.26	Very limited Depth to saturated zone	1.00
61A:						
Atterberry	Not limited		Very limited Water erosion Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone	1.00
61B:						
Atterberry	Somewhat limited Slope	0.26	Very limited Water erosion Depth to saturated zone Slope	1.00 1.00 0.26	Very limited Depth to saturated zone	1.00
68A:						
Sable	Not limited		Very limited Water erosion Ponding Depth to saturated zone	1.00 1.00 1.00	Very limited Ponding Depth to saturated zone	1.00 1.00
68A+:						
Sable	Not limited		Very limited Ponding Depth to saturated zone Water erosion	1.00 1.00 0.50	Very limited Ponding Depth to saturated zone	1.00 1.00
81A:						
Littleton	Not limited		Very limited Water erosion Depth to saturated zone	1.00 1.00	Very limited Depth to saturated zone	1.00
81B:						
Littleton	Somewhat limited Slope	0.26	Very limited Water erosion Depth to saturated zone Slope	1.00 1.00 0.26	Very limited Depth to saturated zone	1.00
86A:						
Osco	Not limited		Very limited Water erosion	1.00	Somewhat limited Depth to saturated zone	0.13

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
86B:						
Osco	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.26	Water erosion	1.00	Depth to saturated zone	0.13
			Slope	0.26		
86C:						
Osco	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Depth to saturated zone	0.13
			Slope	0.99		
86C2:						
Osco	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Depth to saturated zone	0.13
			Slope	0.99		
86C3:						
Osco	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Depth to saturated zone	0.13
			Slope	0.99		
87A:						
Dickinson	Not limited		Very limited		Very limited	
			Too sandy	1.00	Cutbanks cave	1.00
			Water erosion	0.12		
87B:						
Dickinson	Somewhat limited		Very limited		Very limited	
	Slope	0.26	Too sandy	1.00	Cutbanks cave	1.00
			Slope	0.26		
			Water erosion	0.12		
87C2:						
Dickinson	Somewhat limited		Very limited		Very limited	
	Slope	0.99	Too sandy	1.00	Cutbanks cave	1.00
			Slope	0.99		
88A:						
Sparta	Not limited		Very limited		Very limited	
			Too sandy	1.00	Cutbanks cave	1.00
88B:						
Sparta	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.26	Slope	0.26	Cutbanks cave	1.00
88C:						
Sparta	Very limited		Very limited		Very limited	
	Slope	1.00	Too sandy	1.00	Cutbanks cave	1.00
			Slope	1.00	Slope	0.04
88E:						
Sparta	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Cutbanks cave	1.00
			Too sandy	1.00	Slope	1.00
98A:						
Ade	Not limited		Very limited		Very limited	
			Too sandy	1.00	Cutbanks cave	1.00

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
98B:						
Ade	Somewhat limited		Very limited		Very limited	
	Slope	0.50	Too sandy	1.00	Cutbanks cave	1.00
			Slope	0.50		
98D:						
Ade	Very limited		Very limited		Very limited	
	Slope	1.00	Too sandy	1.00	Cutbanks cave	1.00
			Slope	1.00	Slope	0.37
125A:						
Selma	Not limited		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88	Cutbanks cave	1.00
134A:						
Camden	Not limited		Very limited		Very limited	
			Water erosion	1.00	Cutbanks cave	1.00
134B:						
Camden	Somewhat limited		Very limited		Very limited	
	Slope	0.26	Water erosion	1.00	Cutbanks cave	1.00
			Slope	0.26		
134C2:						
Camden	Somewhat limited		Very limited		Very limited	
	Slope	0.99	Water erosion	1.00	Cutbanks cave	1.00
			Slope	0.99		
152A:						
Drummer	Not limited		Very limited		Very limited	
			Water erosion	1.00	Ponding	1.00
			Ponding	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Cutbanks cave	1.00
172A:						
Hoopeston	Not limited		Very limited		Very limited	
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.12	Cutbanks cave	1.00
175B:						
Lamont	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.26	Slope	0.26	Cutbanks cave	1.00
			Water erosion	0.12		
175C2:						
Lamont	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.99	Slope	0.99	Cutbanks cave	1.00
			Water erosion	0.12		
175D2:						
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Cutbanks cave	1.00
			Water erosion	0.12	Slope	0.96

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
175D3:						
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Cutbanks cave	1.00
			Water erosion	0.12	Slope	0.96
175F2:						
Lamont	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Water erosion	0.12	Cutbanks cave	1.00
201A:						
Gilford	Not limited		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Too sandy	1.00	Cutbanks cave	1.00
			Water erosion	0.12		
224C2:						
Strawn	Somewhat limited		Somewhat limited		Not limited	
	Slope	0.99	Slope	0.99		
			Water erosion	0.88		
224D2:						
Strawn	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Slope	1.00	Slope	0.96
			Water erosion	0.88		
224D3:						
Strawn	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Slope	1.00	Slope	0.96
			Water erosion	0.88		
224F2:						
Strawn	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Water erosion	0.88		
227B:						
Argyle	Somewhat limited		Very limited		Very limited	
	Slope	0.26	Water erosion	1.00	Cutbanks cave	1.00
			Slope	0.26		
227C2:						
Argyle	Somewhat limited		Very limited		Very limited	
	Slope	0.99	Water erosion	1.00	Cutbanks cave	1.00
			Slope	0.99		
261A:						
Niota	Not limited		Very limited		Very limited	
			Water erosion	1.00	Ponding	1.00
			Ponding	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Cutbanks cave	1.00
					Too clayey	0.41
268B:						
Mt. Carroll	Somewhat limited		Very limited		Not limited	
	Slope	0.26	Water erosion	1.00		
			Slope	0.26		

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
268C2:						
Mt. Carroll	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
272A:						
Edgington	Not limited		Very limited		Very limited	
			Water erosion	1.00	Ponding	1.00
			Ponding	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00		
274B:						
Seaton	Somewhat limited		Very limited		Not limited	
	Slope	0.26	Water erosion	1.00		
			Slope	0.26		
274C:						
Seaton	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
274C2:						
Seaton	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
274D2:						
Seaton	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Slope	0.96
			Slope	1.00		
274D3:						
Seaton	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Slope	0.96
			Slope	1.00		
274E2:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
			Slope	1.00		
274F:						
Seaton	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
			Slope	1.00		
275A:						
Joy	Not limited		Very limited		Very limited	
			Water erosion	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00		
275B:						
Joy	Somewhat limited		Very limited		Very limited	
	Slope	0.26	Water erosion	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00		
			Slope	0.26		

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
277B:						
Port Byron	Somewhat limited		Very limited		Not limited	
	Slope	0.26	Water erosion	1.00		
			Slope	0.26		
277C:						
Port Byron	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
277C2:						
Port Byron	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
279A:						
Rozetta	Not limited		Very limited		Somewhat limited	
			Water erosion	1.00	Depth to saturated zone	0.13
279B:						
Rozetta	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.26	Water erosion	1.00	Depth to saturated zone	0.13
			Slope	0.26		
280B:						
Fayette	Somewhat limited		Very limited		Not limited	
	Slope	0.26	Water erosion	1.00		
			Slope	0.26		
280C:						
Fayette	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
280C2:						
Fayette	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
280C3:						
Fayette	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
280D2:						
Fayette	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Slope	0.96
			Slope	1.00		
280D3:						
Fayette	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Slope	0.96
			Slope	1.00		
280F2:						
Fayette	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
			Slope	1.00		

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
280G2:						
Fayette	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
			Slope	1.00		
403E2:						
Elizabeth	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Slope	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
	Content of large stones	0.92	Content of large stones	0.92		
			Water erosion	0.12		
410C2:						
Woodbine	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Too clayey	0.88
	Depth to hard bedrock	0.42	Slope	0.99	Depth to hard bedrock	0.42
			Depth to hard bedrock	0.42		
410D2:						
Woodbine	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Slope	0.96
	Depth to hard bedrock	0.42	Slope	1.00	Depth to hard bedrock	0.42
			Depth to hard bedrock	0.42	Too clayey	0.12
410D3:						
Woodbine	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Slope	0.96
	Depth to hard bedrock	0.42	Slope	1.00	Too clayey	0.88
			Depth to hard bedrock	0.42	Depth to hard bedrock	0.42
410F2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Depth to hard bedrock	0.42	Slope	1.00	Too clayey	0.88
			Depth to hard bedrock	0.42	Depth to hard bedrock	0.42
410G2:						
Woodbine	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Depth to hard bedrock	0.42	Slope	1.00	Too clayey	0.88
			Depth to hard bedrock	0.42	Depth to hard bedrock	0.42
411B:						
Ashdale	Somewhat limited		Very limited		Somewhat limited	
	Depth to hard bedrock	0.42	Water erosion	1.00	Too clayey	0.50
	Slope	0.26	Depth to hard bedrock	0.42	Depth to hard bedrock	0.42
			Slope	0.26		

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
411C2:						
Ashdale	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Too clayey	0.50
	Depth to hard bedrock	0.42	Slope	0.99	Depth to hard bedrock	0.42
			Depth to hard bedrock	0.42		
412B:						
Ogle	Somewhat limited		Very limited		Not limited	
	Slope	0.26	Water erosion	1.00		
			Slope	0.26		
412C2:						
Ogle	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
412C3:						
Ogle	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
414B:						
Myrtle	Somewhat limited		Very limited		Not limited	
	Slope	0.26	Water erosion	1.00		
			Slope	0.26		
414C2:						
Myrtle	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
416C2:						
Durand	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
416C3:						
Durand	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
417D3:						
Derinda	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Depth to saturated zone	0.96
	Depth to soft bedrock	0.42	Slope	1.00	Slope	0.96
			Depth to saturated zone	1.00	Depth to soft bedrock	0.42
			Depth to soft bedrock	0.42	Too clayey	0.01
417E2:						
Derinda	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Depth to soft bedrock	0.42	Slope	1.00	Depth to saturated zone	0.96
			Depth to saturated zone	1.00	Depth to soft bedrock	0.42
			Depth to soft bedrock	0.42	Too clayey	0.01

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
419B:						
Flagg	Somewhat limited		Very limited		Not limited	
	Slope	0.26	Water erosion	1.00		
			Slope	0.26		
419C2:						
Flagg	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
419D2:						
Flagg	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Slope	0.96
			Slope	1.00		
419D3:						
Flagg	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Slope	0.96
			Slope	1.00		
429C2:						
Palsgrove	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Too clayey	0.88
	Depth to hard bedrock	0.42	Slope	0.99	Depth to hard bedrock	0.42
			Depth to hard bedrock	0.42		
505D2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Water erosion	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Depth to hard bedrock	1.00	Slope	0.04
			Slope	1.00		
505D3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Water erosion	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Depth to hard bedrock	1.00	Slope	0.04
			Slope	1.00		
505E2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Water erosion	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to hard bedrock	1.00		
505E3:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Water erosion	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to hard bedrock	1.00		
505F2:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Water erosion	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to hard bedrock	1.00		

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
505G:						
Dunbarton	Very limited		Very limited		Very limited	
	Depth to hard bedrock	1.00	Water erosion	1.00	Depth to hard bedrock	1.00
	Slope	1.00	Slope	1.00	Slope	1.00
			Depth to hard bedrock	1.00		
506C2:						
Hitt	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Too clayey	0.98
	Depth to hard bedrock	0.42	Slope	0.99	Depth to hard bedrock	0.42
			Depth to hard bedrock	0.42		
506C3:						
Hitt	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Too clayey	0.98
	Depth to hard bedrock	0.42	Slope	0.99	Depth to hard bedrock	0.42
			Depth to hard bedrock	0.42		
546C2:						
Keltner	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Depth to saturated zone	0.99
			Depth to saturated zone	1.00	Too clayey	0.08
			Slope	0.99		
547C2:						
Eleroy	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Depth to saturated zone	0.99
			Depth to saturated zone	1.00		
			Slope	0.99		
547D2:						
Eleroy	Very limited		Very limited		Somewhat limited	
	Slope	1.00	Water erosion	1.00	Depth to saturated zone	0.99
			Slope	1.00	Slope	0.96
			Depth to saturated zone	1.00		
564B:						
Waukegan	Somewhat limited		Very limited		Very limited	
	Slope	0.26	Water erosion	1.00	Cutbanks cave	1.00
			Too sandy	1.00		
			Slope	0.26		
564C2:						
Waukegan	Somewhat limited		Very limited		Very limited	
	Slope	0.99	Water erosion	1.00	Cutbanks cave	1.00
			Too sandy	1.00		
			Slope	0.99		
565B:						
Tell	Somewhat limited		Very limited		Very limited	
	Slope	0.26	Water erosion	1.00	Cutbanks cave	1.00
			Slope	0.26		

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
565C2:						
Tell	Somewhat limited		Very limited		Very limited	
	Slope	0.99	Water erosion	1.00	Cutbanks cave	1.00
			Slope	0.99		
565D2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Cutbanks cave	1.00
			Slope	1.00	Slope	0.96
565D3:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Cutbanks cave	1.00
			Slope	1.00	Slope	0.96
565F2:						
Tell	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
			Slope	1.00	Cutbanks cave	1.00
569F2:						
Medary	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
			Slope	1.00	Depth to saturated zone	0.99
			Depth to saturated zone	1.00	Too clayey	0.32
572C2:						
Loran	Somewhat limited		Very limited		Very limited	
	Slope	0.99	Water erosion	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Too clayey	0.03
			Slope	0.99		
576A:						
Zwingle	Not limited		Very limited		Very limited	
			Water erosion	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Cutbanks cave	1.00
					Too clayey	0.41
576B:						
Zwingle	Somewhat limited		Very limited		Very limited	
	Slope	0.26	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88	Cutbanks cave	1.00
			Slope	0.26	Too clayey	0.41
576C:						
Zwingle	Somewhat limited		Very limited		Very limited	
	Slope	0.99	Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Slope	0.99	Cutbanks cave	1.00
			Water erosion	0.88	Too clayey	0.41
660D2:						
Coatsburg	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Slope	0.96
			Water erosion	0.50	Too clayey	0.02

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
660D3:						
Coatsburg	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Slope	0.96
			Water erosion	0.88	Too clayey	0.02
675A:						
Greenbush	Not limited		Very limited		Somewhat limited	
			Water erosion	1.00	Depth to saturated zone	0.13
675B:						
Greenbush	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.26	Water erosion	1.00	Depth to saturated zone	0.13
			Slope	0.26		
675C:						
Greenbush	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Depth to saturated zone	0.13
			Slope	0.99		
675C2:						
Greenbush	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.99	Water erosion	1.00	Depth to saturated zone	0.13
			Slope	0.99		
689B:						
Coloma	Somewhat limited		Very limited		Very limited	
	Slope	0.50	Too sandy	1.00	Cutbanks cave	1.00
			Slope	0.50		
689D:						
Coloma	Very limited		Very limited		Very limited	
	Slope	1.00	Too sandy	1.00	Cutbanks cave	1.00
			Slope	1.00	Slope	0.37
689F:						
Coloma	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
			Too sandy	1.00	Cutbanks cave	1.00
735D2:						
Casco	Very limited		Very limited		Very limited	
	Slope	1.00	Too sandy	1.00	Cutbanks cave	1.00
			Slope	1.00	Slope	0.16
			Water erosion	0.88		
Rodman	Very limited		Very limited		Very limited	
	Slope	1.00	Too sandy	1.00	Cutbanks cave	1.00
			Slope	1.00	Slope	0.16
			Water erosion	0.50		
Fox	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Cutbanks cave	1.00
			Too sandy	1.00	Slope	0.16
			Slope	1.00		

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
735E2:						
Casco	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Cutbanks cave	1.00
	Content of large stones	0.01	Too sandy	1.00	Slope	1.00
			Water erosion	0.88		
			Content of large stones	0.01		
Rodman	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Cutbanks cave	1.00
			Too sandy	1.00	Slope	1.00
			Water erosion	0.50		
Fox	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Cutbanks cave	1.00
			Slope	1.00	Slope	1.00
			Too sandy	1.00		
764B:						
Coyne	Somewhat limited		Somewhat limited		Very limited	
	Slope	0.26	Slope	0.26	Cutbanks cave	1.00
			Water erosion	0.12	Dense layer	0.50
785G:						
Lacrescent	Very limited		Very limited		Very limited	
	Slope	1.00	Water erosion	1.00	Slope	1.00
	Content of large stones	1.00	Slope	1.00	Content of large stones	0.31
			Content of large stones	1.00		
798C2:						
Fayette	Somewhat limited		Very limited		Not limited	
	Slope	0.99	Water erosion	1.00		
			Slope	0.99		
Gale	Somewhat limited		Very limited		Very limited	
	Slope	0.99	Water erosion	1.00	Cutbanks cave	1.00
	Depth to soft bedrock	0.71	Slope	0.99	Depth to soft bedrock	0.71
			Depth to soft bedrock	0.71		
802B:						
Orthents	Somewhat limited		Very limited		Not limited	
	Slope	0.37	Water erosion	1.00		
			Slope	0.37		
835G:						
Earthen dam	Not rated		Not rated		Not rated	
862:						
Pits, sand	Not rated		Not rated		Not rated	
864:						
Pits, quarries	Not rated		Not rated		Not rated	
865:						
Pits, gravel	Not rated		Not rated		Not rated	

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
905F:						
NewGlarus	Very limited Depth to hard bedrock Slope	 1.00 1.00	Very limited Water erosion Slope Depth to hard bedrock	 1.00 1.00 1.00	Very limited Depth to hard bedrock Slope Too clayey	 1.00 1.00 0.50
Lamoille	Very limited Slope Content of large stones	 1.00 0.77	Very limited Water erosion Slope Content of large stones	 1.00 1.00 0.77	Very limited Slope Too clayey	 1.00 0.12
905G:						
NewGlarus	Very limited Depth to hard bedrock Slope	 1.00 1.00	Very limited Water erosion Slope Depth to hard bedrock	 1.00 1.00 1.00	Very limited Depth to hard bedrock Slope Too clayey	 1.00 1.00 0.50
Lamoille	Very limited Slope Content of large stones	 1.00 0.77	Very limited Water erosion Slope Content of large stones	 1.00 1.00 0.77	Very limited Slope Too clayey	 1.00 0.12
928C2:						
NewGlarus	Very limited Depth to hard bedrock Slope	 1.00 0.99	Very limited Water erosion Depth to hard bedrock Slope	 1.00 1.00 0.99	Very limited Depth to hard bedrock Too clayey	 1.00 0.50
Palsgrove	Somewhat limited Slope Depth to hard bedrock	 0.99 0.42	Very limited Water erosion Slope Depth to hard bedrock	 1.00 0.99 0.42	Somewhat limited Too clayey Depth to hard bedrock	 0.88 0.42
928D2:						
NewGlarus	Very limited Depth to hard bedrock Slope	 1.00 1.00	Very limited Water erosion Slope Depth to hard bedrock	 1.00 1.00 1.00	Very limited Depth to hard bedrock Slope Too clayey	 1.00 0.96 0.50
Palsgrove	Very limited Slope Depth to hard bedrock	 1.00 0.42	Very limited Water erosion Slope Depth to hard bedrock	 1.00 1.00 0.42	Somewhat limited Slope Too clayey Depth to hard bedrock	 0.96 0.88 0.42
943F2:						
Seaton	Very limited Slope	 1.00	Very limited Water erosion Slope	 1.00 1.00	Very limited Slope	 1.00
Timula	Very limited Slope	 1.00	Very limited Water erosion Slope	 1.00 1.00	Very limited Slope	 1.00

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
943G2:						
Seaton	Very limited Slope	1.00	Very limited Water erosion Slope	1.00 1.00	Very limited Slope	1.00
Timula	Very limited Slope	1.00	Very limited Water erosion Slope	1.00 1.00	Very limited Slope	1.00
952C2:						
Tell	Somewhat limited Slope	0.99	Very limited Water erosion Slope	1.00 0.99	Very limited Cutbanks cave	1.00
Lamont	Somewhat limited Slope	0.99	Somewhat limited Slope Water erosion	0.99 0.12	Very limited Cutbanks cave	1.00
952D2:						
Tell	Very limited Slope	1.00	Very limited Water erosion Slope	1.00 1.00	Very limited Cutbanks cave Slope	1.00 0.96
Lamont	Very limited Slope	1.00	Very limited Slope Water erosion	1.00 0.12	Very limited Cutbanks cave Slope	1.00 0.96
952D3:						
Tell	Very limited Slope	1.00	Very limited Water erosion Slope	1.00 1.00	Very limited Cutbanks cave Slope	1.00 0.96
Lamont	Very limited Slope	1.00	Very limited Slope Water erosion	1.00 0.12	Very limited Cutbanks cave Slope	1.00 0.96
952F2:						
Tell	Very limited Slope	1.00	Very limited Water erosion Slope	1.00 1.00	Very limited Slope Cutbanks cave	1.00 1.00
Lamont	Very limited Slope	1.00	Very limited Slope Water erosion	1.00 0.12	Very limited Slope Cutbanks cave	1.00 1.00
1076A:						
Otter	Not limited		Very limited Ponding Depth to saturated zone Water erosion	1.00 1.00 0.88	Very limited Ponding Depth to saturated zone Frequent flooding	1.00 1.00 0.80
1082A:						
Millington	Not limited		Very limited Ponding Depth to saturated zone Water erosion	1.00 1.00 0.88	Very limited Ponding Depth to saturated zone Frequent flooding	1.00 1.00 0.80

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1107A:						
Sawmill	Not limited		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.50	Frequent flooding	0.80
1239A:						
Dorchester	Not limited		Very limited		Very limited	
			Water erosion	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Frequent flooding	0.80
1451A:						
Lawson	Not limited		Very limited		Very limited	
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88	Frequent flooding	0.80
3076A:						
Otter	Not limited		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88	Frequent flooding	0.80
3082A:						
Millington	Not limited		Very limited		Very limited	
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88	Frequent flooding	0.80
3107+:						
Sawmill	Not limited		Very limited		Very limited	
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88	Frequent flooding	0.80
3107A:						
Sawmill	Not limited		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.50	Frequent flooding	0.80
3333A:						
Wakeland	Not limited		Very limited		Very limited	
			Water erosion	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Frequent flooding	0.80
3415A:						
Orion	Not limited		Very limited		Very limited	
			Water erosion	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Cutbanks cave	1.00
					Frequent flooding	0.80

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3451A:						
Lawson	Not limited		Very limited		Very limited	
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88	Frequent flooding	0.80
3579A:						
Beavercreek	Very limited		Very limited		Somewhat limited	
	Content of large stones	1.00	Content of large stones	1.00	Frequent flooding	0.80
			Water erosion	0.12		
3646L:						
Fluvaquents	Not limited		Very limited		Very limited	
			Water erosion	1.00	Ponding	1.00
			Ponding	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Frequent flooding	0.80
7076A:						
Otter	Not limited		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88		
7082A:						
Millington	Not limited		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88		
7100A:						
Palms	Not limited		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Excess organic matter	1.00	Excess organic matter	1.00
7107+:						
Sawmill	Not limited		Very limited		Very limited	
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88		
7107A:						
Sawmill	Not limited		Very limited		Very limited	
			Ponding	1.00	Ponding	1.00
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88		
7415A:						
Orion	Not limited		Very limited		Very limited	
			Water erosion	1.00	Depth to saturated zone	1.00
			Depth to saturated zone	1.00	Cutbanks cave	1.00

Table 17b.--Water Management--Continued

Map symbol and soil name	Constructing grassed waterways and surface drains		Constructing terraces and diversions		Tile drains and underground outlets	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7451A:						
Lawson	Not limited		Very limited		Very limited	
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Water erosion	0.88		
7452A:						
Riley	Not limited		Very limited		Very limited	
			Depth to saturated zone	1.00	Depth to saturated zone	1.00
			Too sandy	1.00	Cutbanks cave	1.00
			Water erosion	0.88		
8077A:						
Huntsville	Not limited		Somewhat limited		Somewhat limited	
			Water erosion	0.88	Occasional flooding	0.60
					Depth to saturated zone	0.14
8239A:						
Dorchester	Not limited		Very limited		Somewhat limited	
			Water erosion	1.00	Occasional flooding	0.60
8239B:						
Dorchester	Somewhat limited		Very limited		Somewhat limited	
	Slope	0.26	Water erosion	1.00	Occasional flooding	0.60
			Slope	0.26		

Table 17c.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table)

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
21B:		
Pecatonica	Very limited	
	Water erosion	1.00
21C2:		
Pecatonica	Very limited	
	Water erosion	1.00
	Slope	0.06
21C3:		
Pecatonica	Somewhat limited	
	Slope	0.06
21D2:		
Pecatonica	Very limited	
	Water erosion	1.00
	Slope	0.98
21D3:		
Pecatonica	Somewhat limited	
	Slope	0.98
21F2:		
Pecatonica	Very limited	
	Slope	1.00
	Water erosion	1.00
29D3:		
Dubuque	Very limited	
	Water erosion	1.00
	Slope	0.98
37A:		
Worthen	Not limited	
37B:		
Worthen	Very limited	
	Water erosion	1.00
37C:		
Worthen	Very limited	
	Water erosion	1.00
	Slope	0.06
51A:		
Muscatune	Very limited	
	Depth to saturated zone	1.00

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
51B:		
Muscatune	Very limited	
	Depth to saturated zone	1.00
61A:		
Atterberry	Very limited	
	Depth to saturated zone	1.00
61B:		
Atterberry	Very limited	
	Depth to saturated zone	1.00
	Water erosion	1.00
68A:		
Sable	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
68A+:		
Sable	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
81A:		
Littleton	Very limited	
	Depth to saturated zone	1.00
81B:		
Littleton	Very limited	
	Depth to saturated zone	1.00
	Water erosion	1.00
86A:		
Osco	Not limited	
86B:		
Osco	Not limited	
86C:		
Osco	Somewhat limited	
	Slope	0.06
86C2:		
Osco	Very limited	
	Water erosion	1.00
	Slope	0.06
86C3:		
Osco	Very limited	
	Water erosion	1.00
	Slope	0.06

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
87A:		
Dickinson	Somewhat limited	
	Droughty	0.54
87B:		
Dickinson	Somewhat limited	
	Droughty	0.60
87C2:		
Dickinson	Somewhat limited	
	Droughty	0.67
	Slope	0.06
88A:		
Sparta	Very limited	
	Sandy surface layer	1.00
	Wind erosion	1.00
	Droughty	1.00
88B:		
Sparta	Very limited	
	Sandy surface layer	1.00
	Wind erosion	1.00
	Droughty	1.00
88C:		
Sparta	Very limited	
	Sandy surface layer	1.00
	Wind erosion	1.00
	Droughty	1.00
	Slope	0.22
88E:		
Sparta	Very limited	
	Sandy surface layer	1.00
	Wind erosion	1.00
	Droughty	1.00
	Slope	1.00
98A:		
Ade	Very limited	
	Wind erosion	1.00
	Droughty	1.00
98B:		
Ade	Very limited	
	Wind erosion	1.00
	Droughty	1.00
98D:		
Ade	Very limited	
	Wind erosion	1.00
	Droughty	1.00
	Slope	0.60

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
125A:		
Selma	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
134A:		
Camden	Not limited	
134B:		
Camden	Very limited	
	Water erosion	1.00
134C2:		
Camden	Very limited	
	Water erosion	1.00
	Slope	0.06
152A:		
Drummer	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
172A:		
Hoopeston	Very limited	
	Depth to saturated zone	1.00
	Droughty	0.03
175B:		
Lamont	Somewhat limited	
	Droughty	0.06
175C2:		
Lamont	Somewhat limited	
	Slope	0.06
	Droughty	0.01
175D2:		
Lamont	Somewhat limited	
	Slope	0.98
175D3:		
Lamont	Somewhat limited	
	Slope	0.98
175F2:		
Lamont	Very limited	
	Slope	1.00
201A:		
Gilford	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
	Droughty	0.02

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
224C2:		
Strawn	Very limited	
	Water erosion	1.00
	Slope	0.06
224D2:		
Strawn	Very limited	
	Water erosion	1.00
	Slope	0.98
224D3:		
Strawn	Very limited	
	Water erosion	1.00
	Slope	0.98
	Droughty	0.15
224F2:		
Strawn	Very limited	
	Slope	1.00
	Water erosion	1.00
	Droughty	0.05
227B:		
Argyle	Very limited	
	Water erosion	1.00
227C2:		
Argyle	Very limited	
	Water erosion	1.00
	Slope	0.06
261A:		
Niota	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
268B:		
Mt. Carroll	Not limited	
268C2:		
Mt. Carroll	Very limited	
	Water erosion	1.00
	Slope	0.06
272A:		
Edgington	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
274B:		
Seaton	Very limited	
	Water erosion	1.00
274C:		
Seaton	Very limited	
	Water erosion	1.00
	Slope	0.06

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
274C2:		
Seaton	Very limited	
	Water erosion	1.00
	Slope	0.06
274D2:		
Seaton	Very limited	
	Water erosion	1.00
	Slope	0.98
274D3:		
Seaton	Very limited	
	Water erosion	1.00
	Slope	0.98
274E2:		
Seaton	Very limited	
	Slope	1.00
	Water erosion	1.00
274F:		
Seaton	Very limited	
	Slope	1.00
	Water erosion	1.00
275A:		
Joy	Very limited	
	Depth to saturated zone	1.00
275B:		
Joy	Very limited	
	Depth to saturated zone	1.00
277B:		
Port Byron	Not limited	
277C:		
Port Byron	Somewhat limited	
	Slope	0.06
277C2:		
Port Byron	Very limited	
	Water erosion	1.00
	Slope	0.06
279A:		
Rozetta	Not limited	
279B:		
Rozetta	Very limited	
	Water erosion	1.00
280B:		
Fayette	Very limited	
	Water erosion	1.00

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
280C:		
Fayette	Very limited	
	Water erosion	1.00
	Slope	0.06
280C2:		
Fayette	Very limited	
	Water erosion	1.00
	Slope	0.06
280C3:		
Fayette	Very limited	
	Water erosion	1.00
	Slope	0.06
280D2:		
Fayette	Very limited	
	Water erosion	1.00
	Slope	0.98
280D3:		
Fayette	Very limited	
	Water erosion	1.00
	Slope	0.98
280F2:		
Fayette	Very limited	
	Slope	1.00
	Water erosion	1.00
280G2:		
Fayette	Very limited	
	Slope	1.00
	Water erosion	1.00
403E2:		
Elizabeth	Very limited	
	Depth to hard bedrock	1.00
	Droughty	1.00
	Slope	1.00
410C2:		
Woodbine	Very limited	
	Water erosion	1.00
	Slope	0.06
410D2:		
Woodbine	Very limited	
	Water erosion	1.00
	Slope	0.98
410D3:		
Woodbine	Very limited	
	Water erosion	1.00
	Slope	0.98
410F2:		
Woodbine	Very limited	
	Slope	1.00
	Water erosion	1.00

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
410G2:		
Woodbine	Very limited	
	Slope	1.00
	Water erosion	1.00
411B:		
Ashdale	Not limited	
411C2:		
Ashdale	Very limited	
	Water erosion	1.00
	Slope	0.06
412B:		
Ogle	Not limited	
412C2:		
Ogle	Very limited	
	Water erosion	1.00
	Slope	0.06
412C3:		
Ogle	Very limited	
	Water erosion	1.00
	Slope	0.06
414B:		
Myrtle	Very limited	
	Water erosion	1.00
414C2:		
Myrtle	Very limited	
	Water erosion	1.00
	Slope	0.06
416C2:		
Durand	Very limited	
	Water erosion	1.00
	Slope	0.06
416C3:		
Durand	Very limited	
	Water erosion	1.00
	Slope	0.06
417D3:		
Derinda	Very limited	
	Water erosion	1.00
	Depth to soft bedrock	0.99
	Slope	0.98
	Droughty	0.42
417E2:		
Derinda	Very limited	
	Slope	1.00
	Water erosion	1.00
	Depth to soft bedrock	0.99

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
419B:		
Flagg	Very limited	
	Water erosion	1.00
419C2:		
Flagg	Very limited	
	Water erosion	1.00
	Slope	0.06
419D2:		
Flagg	Very limited	
	Water erosion	1.00
	Slope	0.98
419D3:		
Flagg	Very limited	
	Water erosion	1.00
	Slope	0.98
429C2:		
Palsgrove	Very limited	
	Water erosion	1.00
	Slope	0.06
505D2:		
Dunbarton	Very limited	
	Depth to hard bedrock	1.00
	Droughty	1.00
	Water erosion	1.00
	Slope	0.22
505D3:		
Dunbarton	Very limited	
	Depth to hard bedrock	1.00
	Droughty	1.00
	Water erosion	1.00
	Slope	0.22
505E2:		
Dunbarton	Very limited	
	Depth to hard bedrock	1.00
	Droughty	1.00
	Water erosion	1.00
	Slope	1.00
505E3:		
Dunbarton	Very limited	
	Depth to hard bedrock	1.00
	Droughty	1.00
	Water erosion	1.00
	Slope	1.00

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
505F2:		
Dunbarton	Very limited	
	Depth to hard bedrock	1.00
	Droughty	1.00
	Water erosion	1.00
	Slope	1.00
505G:		
Dunbarton	Very limited	
	Depth to hard bedrock	1.00
	Droughty	1.00
	Water erosion	1.00
	Slope	1.00
506C2:		
Hitt	Very limited	
	Water erosion	1.00
	Slope	0.06
506C3:		
Hitt	Very limited	
	Water erosion	1.00
	Slope	0.06
546C2:		
Keltner	Somewhat limited	
	Slope	0.06
547C2:		
Eleroy	Very limited	
	Water erosion	1.00
	Slope	0.06
547D2:		
Eleroy	Very limited	
	Water erosion	1.00
	Slope	0.98
564B:		
Waukegan	Very limited	
	Water erosion	1.00
564C2:		
Waukegan	Very limited	
	Water erosion	1.00
	Slope	0.06
565B:		
Tell	Very limited	
	Water erosion	1.00
565C2:		
Tell	Very limited	
	Water erosion	1.00
	Slope	0.06

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
565D2:		
Tell	Very limited	
	Water erosion	1.00
	Slope	0.98
565D3:		
Tell	Very limited	
	Water erosion	1.00
	Slope	0.98
565F2:		
Tell	Very limited	
	Slope	1.00
	Water erosion	1.00
569F2:		
Medary	Very limited	
	Slope	1.00
	Water erosion	1.00
572C2:		
Loran	Somewhat limited	
	Slope	0.06
576A:		
Zwingle	Very limited	
	Depth to saturated zone	1.00
576B:		
Zwingle	Very limited	
	Depth to saturated zone	1.00
	Water erosion	1.00
576C:		
Zwingle	Very limited	
	Depth to saturated zone	1.00
	Water erosion	1.00
	Slope	0.06
660D2:		
Coatsburg	Very limited	
	Depth to saturated zone	1.00
	Slope	0.98
660D3:		
Coatsburg	Very limited	
	Depth to saturated zone	1.00
	Water erosion	1.00
	Slope	0.98
	Droughty	0.65
675A:		
Greenbush	Not limited	

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
675B:		
Greenbush	Very limited	
	Water erosion	1.00
675C:		
Greenbush	Very limited	
	Water erosion	1.00
	Slope	0.06
675C2:		
Greenbush	Very limited	
	Water erosion	1.00
	Slope	0.06
689B:		
Coloma	Very limited	
	Sandy surface layer	1.00
	Wind erosion	1.00
	Droughty	1.00
689D:		
Coloma	Very limited	
	Sandy surface layer	1.00
	Wind erosion	1.00
	Droughty	1.00
	Slope	0.60
689F:		
Coloma	Very limited	
	Sandy surface layer	1.00
	Wind erosion	1.00
	Droughty	1.00
	Slope	1.00
735D2:		
Casco	Very limited	
	Water erosion	1.00
	Droughty	1.00
	Slope	0.40
Rodman	Very limited	
	Droughty	1.00
	Slope	0.40
Fox	Very limited	
	Water erosion	1.00
	Slope	0.40
735E2:		
Casco	Very limited	
	Droughty	1.00
	Water erosion	1.00
	Slope	1.00
Rodman	Very limited	
	Droughty	1.00
	Slope	1.00

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
735E2:		
Fox	Very limited	
	Water erosion	1.00
	Slope	1.00
764B:		
Coyne	Not limited	
785G:		
Lacrescent	Very limited	
	Slope	1.00
	Droughty	0.88
	Content of large stones	0.50
798C2:		
Fayette	Very limited	
	Water erosion	1.00
	Slope	0.06
Gale	Very limited	
	Depth to soft bedrock	1.00
	Water erosion	1.00
	Droughty	0.80
	Slope	0.06
802B:		
Orthents	Very limited	
	Water erosion	1.00
835G:		
Earthen dam	Not rated	
862:		
Pits, sand	Not rated	
864:		
Pits, quarries	Not rated	
865:		
Pits, gravel	Not rated	
905F:		
NewGlarus	Very limited	
	Slope	1.00
	Water erosion	1.00
	Depth to hard bedrock	0.99
	Droughty	0.10
Lamoille	Very limited	
	Slope	1.00
	Water erosion	1.00
905G:		
NewGlarus	Very limited	
	Slope	1.00
	Water erosion	1.00
	Depth to hard bedrock	0.99
	Droughty	0.10

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
905G:		
Lamoille	Very limited	
	Slope	1.00
	Water erosion	1.00
928C2:		
NewGlarus	Very limited	
	Water erosion	1.00
	Depth to hard bedrock	0.99
	Slope	0.06
	Droughty	0.02
Palsgrove	Very limited	
	Water erosion	1.00
	Slope	0.06
928D2:		
NewGlarus	Very limited	
	Water erosion	1.00
	Depth to hard bedrock	0.99
	Slope	0.98
	Droughty	0.02
Palsgrove	Very limited	
	Water erosion	1.00
	Slope	0.98
943F2:		
Seaton	Very limited	
	Slope	1.00
	Water erosion	1.00
Timula	Very limited	
	Slope	1.00
	Water erosion	1.00
943G2:		
Seaton	Very limited	
	Slope	1.00
	Water erosion	1.00
Timula	Very limited	
	Slope	1.00
	Water erosion	1.00
952C2:		
Tell	Very limited	
	Water erosion	1.00
	Slope	0.06
Lamont	Somewhat limited	
	Slope	0.06
	Droughty	0.01
952D2:		
Tell	Very limited	
	Water erosion	1.00
	Slope	0.98

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
952D2:		
Lamont	Somewhat limited	
	Slope	0.98
952D3:		
Tell	Very limited	
	Water erosion	1.00
	Slope	0.98
Lamont	Somewhat limited	
	Slope	0.98
952F2:		
Tell	Very limited	
	Slope	1.00
	Water erosion	1.00
Lamont	Very limited	
	Slope	1.00
1076A:		
Otter	Very limited	
	Ponding	1.00
	Flooding	1.00
	Depth to saturated zone	1.00
1082A:		
Millington	Very limited	
	Ponding	1.00
	Flooding	1.00
	Depth to saturated zone	1.00
1107A:		
Sawmill	Very limited	
	Ponding	1.00
	Flooding	1.00
	Depth to saturated zone	1.00
1239A:		
Dorchester	Very limited	
	Flooding	1.00
	Depth to saturated zone	1.00
1451A:		
Lawson	Very limited	
	Flooding	1.00
	Depth to saturated zone	1.00
3076A:		
Otter	Very limited	
	Ponding	1.00
	Flooding	1.00
	Depth to saturated zone	1.00

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
3082A:		
Millington	Very limited	
	Flooding	1.00
	Depth to saturated zone	1.00
3107+:		
Sawmill	Very limited	
	Flooding	1.00
	Depth to saturated zone	1.00
3107A:		
Sawmill	Very limited	
	Ponding	1.00
	Flooding	1.00
	Depth to saturated zone	1.00
3333A:		
Wakeland	Very limited	
	Flooding	1.00
	Depth to saturated zone	1.00
3415A:		
Orion	Very limited	
	Flooding	1.00
	Depth to saturated zone	1.00
3451A:		
Lawson	Very limited	
	Flooding	1.00
	Depth to saturated zone	1.00
3579A:		
Beavercreek	Very limited	
	Flooding	1.00
	Droughty	0.90
3646L:		
Fluvaquents	Very limited	
	Ponding	1.00
7076A:		
Otter	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
7082A:		
Millington	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00

Table 17c.--Water Management--Continued

Map symbol and soil name	Sprinkler irrigation	
	Rating class and limiting features	Value
7100A:		
Palms	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
7107+:		
Sawmill	Very limited	
	Depth to saturated zone	1.00
7107A:		
Sawmill	Very limited	
	Ponding	1.00
	Depth to saturated zone	1.00
7415A:		
Orion	Somewhat limited	
	Depth to saturated zone	0.97
7451A:		
Lawson	Very limited	
	Depth to saturated zone	1.00
7452A:		
Riley	Not rated	
8077A:		
Huntsville	Not limited	
8239A:		
Dorchester	Not limited	
8239B:		
Dorchester	Very limited	
	Water erosion	1.00

Table 18.--Engineering Index Properties

(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
21B:												
Pecatonica------	0-3	Silt loam	CL	A-6, A-4	0	0	100	100	95-100	95-100	24-35	8-15
	3-10	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	95-100	20-30	5-15
	10-18	Silt loam, silty clay loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
	18-26	Clay loam, sandy clay loam	CL, SC	A-7-6, A-6	0-2	0-5	90-100	80-100	70-95	40-80	37-46	19-25
	26-68	Sandy clay loam, gravelly sandy clay loam, clay loam, loam, sandy loam	CL, SC	A-7-6, A-2-6, A-6	0-2	0-5	85-100	65-100	50-95	30-80	29-46	12-25
	68-80	Loam, sandy loam, gravelly sandy loam	CL, SC	A-6, A-2-4, A-4	0-2	0-5	85-100	65-100	50-95	30-80	24-38	9-19
21C2:												
Pecatonica------	0-7	Silt loam	CL-ML, CL	A-6, A-4	0	0	100	100	95-100	95-100	25-40	5-17
	7-19	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	90-100	85-100	30-41	13-21
	19-60	Clay loam, sandy clay loam, loam	CL, SC	A-6, A-2-6, A-7-6	0-1	0-5	90-100	80-100	45-95	30-80	35-46	17-25
21C3:												
Pecatonica------	0-7	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	35-45	15-25
	7-55	Clay loam, sandy clay loam, loam	SC, CL	A-6, A-2-6, A-7-6	0-1	0-5	90-100	80-100	45-95	30-80	35-46	17-25
	55-60	Loam, sandy loam, gravelly sandy loam	SC, CL	A-6, A-2-4, A-4	0-2	0-5	85-100	65-100	50-95	30-80	24-38	9-19

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
21D2:												
Pecatonica------	0-7	Silt loam	CL-ML, CL	A-6, A-4	0	0	100	100	95-100	95-100	25-40	5-17
	7-19	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	90-100	85-100	30-41	13-21
	19-60	Clay loam, sandy clay loam, loam	SC, CL	A-6, A-7, A-7-6	0-1	0-5	90-100	80-100	45-95	30-80	35-46	17-25
21D3:												
Pecatonica------	0-7	Silty clay loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	7-55	Clay loam, sandy clay loam, loam	CL	A-6, A-2-6, A-7-6	0-1	0-5	90-100	80-100	45-95	30-80	35-46	17-25
	55-60	Loam, sandy loam, gravelly sandy loam	SC, CL	A-6, A-2-4, A-4	0-2	0-5	85-100	65-100	50-95	30-80	24-38	9-19
21F2:												
Pecatonica------	0-5	Silt loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	30-45	10-25
	5-21	Silt loam, silty clay loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
	21-60	Clay loam, sandy clay loam	CL, SC	A-7-6, A-6	0-2	0-5	90-100	80-100	70-95	40-80	37-46	19-25
29D3:												
Dubuque---------	0-5	Silty clay loam	CL	A-6	0	0	100	100	100	95-100	35-47	15-22
	5-21	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	36-47	18-25
	21-26	Clay, silty clay	CH, CL	A-7-6	0	2-10	85-95	80-90	70-85	65-85	49-70	29-44
	26-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
37A:												
Worthen---------	0-29	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	80-100	25-40	7-21
	29-64	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	80-100	25-40	7-21
	64-80	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	80-100	25-40	7-21
37B:												
Worthen---------	0-24	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	80-100	25-40	7-21
	24-56	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	80-100	25-40	7-21
	56-80	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	80-100	25-40	7-21

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
37C:												
Worthen---------	0-24	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	80-100	25-40	7-21
	24-56	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	80-100	25-40	7-21
	56-80	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	80-100	25-40	7-21
51A:												
Muscatune-------	0-16	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	97-100	95-100	24-37	4-14
	16-22	Silty clay loam, silt loam	CL, ML	A-6	0	0	100	100	97-100	95-100	35-40	14-20
	22-46	Silty clay loam	CL, ML	A-7-6, A-6	0	0	100	100	97-100	95-100	37-46	16-24
	46-60	Silt loam, silty clay loam	CL, ML	A-6, A-4	0	0	100	100	96-100	93-100	24-37	7-18
51B:												
Muscatune-------	0-14	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	97-100	95-100	24-37	4-14
	14-42	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	97-100	95-100	35-46	14-24
	42-60	Silt loam, silty clay loam	CL, ML	A-6, A-4	0	0	100	100	96-100	93-100	24-37	7-18
61A:												
Atterberry------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	95-100	24-37	6-16
	9-17	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	95-100	24-37	7-18
	17-48	Silty clay loam, silt loam	ML, CL	A-6, A-7-6	0	0	100	100	95-100	95-100	37-46	16-25
	48-60	Silt loam	CL, ML	A-6, A-4	0	0	100	100	95-100	95-100	24-37	7-18
61B:												
Atterberry------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	95-100	24-37	6-16
	9-13	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	95-100	24-37	7-18
	13-48	Silty clay loam, silt loam	ML, CL	A-6, A-7-6	0	0	100	100	95-100	95-100	37-46	16-25
	48-60	Silt loam	CL, ML	A-6, A-4	0	0	100	100	95-100	95-100	24-37	7-18
68A:												
Sable-----------	0-17	Silty clay loam	CH, CL, MH, ML	A-7-6	0	0	100	100	95-100	95-100	41-65	15-35
	17-23	Silty clay loam	CH, CL, MH, ML	A-7-6	0	0	100	100	95-100	95-100	41-65	15-35
	23-60	Silty clay loam, silt loam	CL, CH	A-7-6	0	0	100	100	95-100	95-100	40-55	20-35

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
68A+:												
Sable	0-13	Silt loam	CL	A-6, A-7	0	0	100	100	95-100	95-100	30-45	10-20
	13-24	Silty clay loam	CH, CL, MH, ML	A-7-6	0	0	100	100	95-100	95-100	41-65	15-35
	24-50	Silty clay loam, silt loam	CH, CL	A-7-6	0	0	100	100	95-100	95-100	40-55	20-35
	50-60	Silt loam, silty clay loam	CL	A-6	0	0	100	100	95-100	95-100	30-40	10-20
81A:												
Littleton	0-9	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	90-100	25-40	7-20
	9-32	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	90-100	25-40	7-20
	32-60	Silt loam	CL, CL-ML	A-4, A-6, A-7	0	0	100	100	95-100	80-100	20-45	5-20
81B:												
Littleton	0-9	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	90-100	25-40	7-20
	9-32	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	90-100	25-40	7-20
	32-60	Silt loam	CL, CL-ML	A-4, A-6, A-7	0	0	100	100	95-100	80-100	20-45	5-20
86A:												
Osco	0-13	Silt loam	CL, ML	A-6, A-4	0	0	100	100	100	95-100	35-45	7-20
	13-38	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	40-50	15-25
	38-60	Silt loam, silty clay loam	CL, ML	A-6, A-4	0	0	100	100	100	95-100	35-45	7-25
86B:												
Osco	0-14	Silt loam	CL, ML	A-6, A-4	0	0	100	100	100	95-100	35-45	7-20
	14-55	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	40-50	15-25
	55-60	Silt loam, silty clay loam	CL, ML	A-6, A-4	0	0	100	100	100	95-100	35-45	7-25

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
86C:												
Osco----------	0-14	Silt loam	CL, ML	A-6, A-4	0	0	100	100	97-100	95-100	35-45	10-20
	14-43	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	97-100	95-100	40-50	15-25
	43-60	Silt loam, silty clay loam	CL	A-6, A-7-6	0	0	100	100	97-100	93-100	35-45	15-25
86C2:												
Osco----------	0-9	Silt loam	CL, ML	A-6, A-4	0	0	100	100	95-100	95-100	35-45	10-20
	9-34	Silty clay loam, silt loam	CL	A-7-6, A-6	0	0	100	100	95-100	95-100	40-50	15-25
	34-60	Silt loam, silty clay loam	CL, ML	A-6, A-4	0	0	100	100	95-100	95-100	35-45	7-25
86C3:												
Osco----------	0-7	Silty clay loam	CL	A-7-6	0	0	100	100	100	95-100	40-50	15-25
	7-30	Silty clay loam, silt loam	CL, ML	A-6, A-7-6	0	0	100	100	100	95-100	40-50	15-25
	30-60	Silt loam, silty clay loam	ML, CL	A-6, A-7-6	0	0	100	100	100	95-100	35-45	15-25
87A:												
Dickinson-------	0-8	Sandy loam	SC-SM, SC, SM	A-4, A-2-4	0	0	100	100	63-76	24-50	17-26	3-11
	8-20	Fine sandy loam, sandy loam	SC, SC-SM, SM	A-4, A-2-4	0	0	100	100	63-87	24-50	17-26	4-11
	20-31	Fine sandy loam, sandy loam	SC-SM, SC, SM	A-4	0	0	100	100	63-87	24-50	17-26	4-12
	31-36	Loamy sand, loamy fine sand, fine sand	SM, SC-SM, SP-SM	A-2-4, A-3	0	0	100	100	55-80	7-25	9-15	NP-5
	36-60	Sand, loamy fine sand, loamy sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-80	7-25	9-14	NP-5

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
87B:												
Dickinson-------	0-9	Sandy loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	63-76	24-50	19-25	2-8
	9-17	Sandy loam, fine sandy loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	63-87	24-50	19-25	3-9
	17-33	Sandy loam, fine sandy loam	SC, SC-SM	A-4	0	0	100	100	65-87	25-50	17-22	4-9
	33-41	Loamy sand, loamy fine sand, fine sand	SC-SM, SM	A-2-4, A-3	0	0	100	100	58-80	7-25	10-20	NP-5
	41-60	Sand, loamy fine sand, loamy sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	50-80	7-25	6-16	NP-5
87C2:												
Dickinson-------	0-11	Sandy loam	SC-SM, SC, SM	A-4, A-2	0	0	100	100	63-76	24-50	17-30	3-11
	11-29	Fine sandy loam, sandy loam	SC-SM, SC, SM	A-4	0	0	100	100	63-87	24-50	17-30	4-12
	29-35	Loamy sand, loamy fine sand, fine sand	SM, SC-SM, SP-SM	A-2-4, A-3	0	0	100	100	55-80	7-25	9-20	NP-5
	35-60	Sand, loamy fine sand, loamy sand	SP-SM, SM	A-2-4, A-3	0	0	100	100	50-80	7-25	9-14	NP-5
88A:												
Sparta----------	0-17	Loamy sand	SM	A-2-4, A-4	0	0	85-100	85-100	50-95	10-50	0-14	NP
	17-31	Loamy sand, fine sand, sand	SM, SP-SM	A-2-4, A-3, A-4	0	0	85-100	85-100	50-95	5-50	0-14	NP
	31-72	Stratified sand to loamy sand	SP-SM, SM, SP	A-2-4, A-3	0	0	85-100	85-100	50-95	4-50	0-14	NP-4
88B:												
Sparta----------	0-14	Loamy sand	SM	A-4, A-2-4	0	0	85-100	85-100	50-95	10-50	0-14	NP
	14-47	Loamy sand, fine sand, sand	SM, SP-SM	A-2-4, A-3, A-4	0	0	85-100	85-100	50-95	5-50	0-14	NP
	47-72	Stratified sand to loamy sand	SM, SP, SP-SM	A-2-4, A-3	0	0	85-100	85-100	50-95	4-50	0-14	NP-4

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
88C:												
Sparta----------	0-8	Loamy sand	SM	A-4, A-2-4	0	0	85-100	85-100	50-95	10-50	0-14	NP
	8-17	Loamy sand	SM	A-4, A-2-4	0	0	85-100	85-100	50-95	10-50	0-14	NP
	17-33	Loamy sand, fine sand, sand	SM, SP-SM	A-2-4, A-3, A-4	0	0	85-100	85-100	50-95	5-50	0-14	NP
	33-72	Stratified sand to loamy sand	SM, SP, SP-SM	A-2-4, A-3	0	0	85-100	85-100	50-95	4-50	0-14	NP-4
88E:												
Sparta----------	0-17	Loamy sand	SM	A-2-4, A-4	0	0	85-100	85-100	50-95	10-50	0-14	NP
	17-32	Loamy sand, fine sand, sand	SM, SP-SM	A-2-4, A-3, A-4	0	0	85-100	85-100	50-95	5-50	0-14	NP
	32-60	Sand, fine sand	SM, SP, SP-SM	A-2-4, A-3	0	0	85-100	85-100	50-95	4-50	0-14	NP-4
98A:												
Ade----------	0-17	Loamy fine sand	SM	A-2-4	0	0	100	100	75-95	18-34	6-20	NP-3
	17-36	Loamy fine sand, fine sand	SM	A-2-4, A-3	0	0	100	100	75-98	8-35	4-15	NP-3
	36-80	Stratified sand to sandy loam	SM, SP, SP-SM	A-2-4, A-3	0	0	100	100	65-95	2-15	0-14	NP-4
98B:												
Ade----------	0-10	Loamy fine sand	SM	A-2-4	0	0	100	100	75-95	18-34	6-20	NP-3
	10-30	Fine sand, loamy fine sand	SM	A-2-4, A-3	0	0	100	100	75-98	8-35	4-15	NP-3
	30-80	Stratified sand to loam	SM, SP, SP-SM	A-2-4, A-3	0	0	100	100	65-95	2-15	0-14	NP-4
98D:												
Ade----------	0-17	Loamy fine sand	SM	A-2-4	0	0	100	100	75-95	18-34	6-20	NP-3
	17-36	Loamy fine sand, fine sand	SM	A-2-4, A-3	0	0	100	100	75-98	8-35	4-15	NP-3
	36-80	Stratified sand to sandy loam	SM, SP, SP-SM	A-2-4, A-3	0	0	100	100	65-95	2-15	0-14	NP-4

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
125A:												
Selma----------	0-23	Loam	CL	A-4, A-6	0	0	100	95-100	80-100	55-85	25-35	7-17
	23-53	Clay loam, sandy loam, loam, silty clay loam	CL, ML, SC	A-6	0	0	100	95-100	80-95	38-85	24-36	11-19
	53-60	Stratified sand to silt loam	CL, CL-ML, SC, SC-SM	A-2, A-4, A-2-4	0	0	90-100	85-100	60-90	30-70	15-35	1-20
134A:												
Camden----------	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	95-100	24-37	6-15
	7-12	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	95-100	24-35	6-15
	12-26	Silt loam, silty clay loam	CL	A-6	0	0	100	97-100	95-100	90-100	35-46	14-24
	26-53	Clay loam, sandy loam, silt loam	CL, ML, SC	A-4, A-6	0	0-5	90-100	90-100	70-85	45-70	25-33	8-14
	53-60	Stratified loamy sand to sandy loam	SC-SM, SM	A-2-4	0	0-5	90-100	70-100	35-60	14-40	19-25	1-7
134B:												
Camden----------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	95-100	24-37	6-15
	9-15	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	95-100	24-35	6-15
	15-34	Silt loam, silty clay loam	CL	A-6	0	0	100	97-100	95-100	90-100	35-46	14-24
	34-40	Clay loam, sandy loam, silt loam	CL, ML, SC	A-4, A-6	0	0-5	90-100	90-100	70-85	45-70	25-33	8-14
	40-60	Stratified loamy sand to sandy loam	SC-SM, SM	A-2-4	0	0-5	90-100	70-100	35-60	14-40	19-25	1-7
134C2:												
Camden----------	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	100	100	95-100	95-100	24-37	6-15
	7-34	Silt loam, silty clay loam	CL	A-6	0	0	100	97-100	95-100	95-100	35-46	14-24
	34-43	Loam, clay loam	CL, ML, SC	A-4, A-6	0	0	90-100	90-100	70-85	45-70	25-33	8-14
	43-80	Stratified loamy sand to sandy loam	SC-SM, SM	A-2-4, A-4, A-1-b	0	0	90-100	80-100	35-60	15-40	19-25	1-7

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
152A:												
Drummer---------	0-14	Silty clay loam	CL	A-6, A-7	0	0	100	95-100	95-100	85-95	30-50	15-30
	14-41	Silty clay loam, silt loam, silty clay	CL	A-6, A-7	0	0	100	95-100	95-100	85-95	30-50	15-30
	41-47	Loam, silt loam, clay loam, sandy loam	CL, SC	A-6, A-7	0	0-5	95-100	90-100	75-95	40-85	30-50	15-30
	47-60	Stratified loamy sand to silty clay loam	CL, SC	A-2-4, A-4, A-6	0	0-5	95-100	75-95	75-95	15-80	20-35	7-20
172A:												
Hoopeston-------	0-14	Sandy loam	SC-SM, SC, SM	A-4, A-2-4	0	0	90-100	90-100	70-90	25-45	0-25	NP-10
	14-38	Sandy loam	SC, SC-SM, SM	A-4, A-2-4	0	0	90-100	90-100	60-85	25-50	0-30	NP-10
	38-60	Sand	SM, SC, SC-SM, SP-SM	A-2-4, A-3	0	0	90-100	90-100	50-80	5-35	0-25	NP-10
175B:												
Lamont----------	0-9	Fine sandy loam	CL-ML, ML, SC-SM	A-2, A-4	0	0	100	100	80-95	25-55	16-28	1-10
	9-29	Fine sandy loam, loam, sandy clay loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	85-95	30-50	16-33	2-15
	29-60	Loamy fine sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	70-90	5-25	0-23	NP-6
175C2:												
Lamont----------	0-9	Fine sandy loam	CL-ML, ML, SC-SM	A-2, A-4	0	0	100	100	80-95	25-55	16-28	1-10
	9-34	Fine sandy loam, loam, sandy clay loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	85-95	30-50	16-33	2-15
	34-60	Loamy fine sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	70-90	5-25	0-23	NP-6

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
175D2:												
Lamont----------	0-7	Fine sandy loam	CL-ML, ML, SC-SM	A-2, A-4	0	0	100	100	80-95	25-55	16-28	1-10
	7-45	Fine sandy loam, loam, sandy clay loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	85-95	30-50	16-33	2-15
	45-60	Loamy fine sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	70-90	5-25	0-23	NP-6
175D3:												
Lamont----------	0-4	Fine sandy loam	CL-ML, ML, SC-SM	A-2, A-4	0	0	100	100	80-95	25-55	16-28	1-10
	4-43	Fine sandy loam, loam, sandy clay loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	85-95	30-50	16-33	2-15
	43-60	Loamy fine sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	70-90	5-25	0-23	NP-6
175F2:												
Lamont----------	0-7	Fine sandy loam	CL-ML, ML, SC-SM	A-2, A-4	0	0	100	100	80-95	25-55	16-28	1-10
	7-45	Fine sandy loam, loam, sandy clay loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	85-95	30-50	16-33	2-15
	45-60	Loamy fine sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	70-90	5-25	0-23	NP-6
201A:												
Gilford---------	0-18	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	95-100	55-85	25-45	10-25	2-10
	18-32	Sandy loam, fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	95-100	85-100	55-85	25-40	10-25	3-10
	32-60	Sand, loamy sand, coarse sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0	0	95-100	85-100	5-75	0-20	0-15	NP-2

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
224C2:												
Strawn----------	0-8	Silt loam	CL, CL-ML, ML	A-6, A-4	0	0-5	93-100	90-100	85-100	65-95	29-43	12-18
	8-23	Clay loam, loam, silty clay loam	CL	A-6, A-7-6	0-1	0-5	90-100	80-100	75-95	55-95	35-47	17-25
	23-60	Loam, silt loam, clay loam	CL, SC	A-4, A-6	0-2	0-5	85-100	80-100	75-99	50-85	31-40	15-21
224D2:												
Strawn----------	0-9	Silt loam	CL, CL-ML, ML	A-6, A-4	0	0-5	93-100	90-100	85-100	65-95	29-43	12-18
	9-21	Clay loam, loam, silty clay loam	CL	A-6, A-7-6	0-1	0-5	90-100	80-100	75-95	55-95	35-47	17-25
	21-60	Loam, silt loam, clay loam	CL, SC	A-4, A-6	0-2	0-5	85-100	80-100	75-99	50-85	31-40	15-21
224D3:												
Strawn----------	0-8	Clay loam, silty clay loam	CL	A-6, A-7-6	0-1	0-5	90-100	80-100	75-95	50-95	39-49	19-25
	8-19	Clay loam, loam, silty clay loam	CL	A-6, A-7-6	0-1	0-5	90-100	80-100	75-95	55-95	35-47	17-25
	19-60	Loam, silt loam, clay loam	CL, SC	A-4, A-6	0-2	0-5	85-100	80-100	75-99	50-85	31-40	15-21
224F2:												
Strawn----------	0-5	Silt loam	CL, CL-ML, ML	A-6, A-4	0	0-5	93-100	90-100	85-100	65-95	29-43	12-18
	5-18	Clay loam, loam, silty clay loam	CL	A-6, A-7-6	0-1	0-5	90-100	80-100	75-95	55-95	35-47	17-25
	18-60	Loam, silt loam, clay loam	CL, SC	A-4, A-6	0-2	0-5	85-100	80-100	75-99	50-85	31-40	15-21

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
227B:												
Argyle----------	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	85-100	35-45	13-18
	7-13	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	95-100	85-100	26-38	9-18
	13-25	Silty clay loam	CL	A-6, A-7-6	0	0	100	95-100	90-100	80-95	37-47	19-25
	25-70	Gravelly clay loam, clay loam, gravelly sandy clay loam	CL, ML, SC, SM	A-2-6, A-4, A-6, A-7-6	0	0-5	85-100	55-100	3-85	20-75	33-44	17-25
	70-84	Sandy loam, clay loam	CL, ML, SC, SM	A-2-4, A-4, A-6, A-1-b	0-2	0-5	90-100	75-100	30-75	15-65	16-40	2-21
227C2:												
Argyle----------	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	85-100	35-45	13-18
	7-23	Silty clay loam	CL	A-6, A-7-6	0	0	100	95-100	90-100	80-95	37-47	19-25
	23-58	Gravelly clay loam, clay loam, gravelly sandy clay loam	CL, ML, SC, SM	A-7-6, A-2-6, A-4, A-6	0	0-5	85-100	55-100	3-85	20-75	33-44	17-25
	58-60	Sandy loam, clay loam	CL, ML, SC, SM	A-1-b, A-2-4, A-4, A-6	0-2	0-5	90-100	75-100	30-75	15-65	16-40	2-21
261A:												
Niota-----------	0-9	Silt loam	ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	30-40	5-15
	9-16	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	25-35	5-15
	16-27	Silty clay, clay, silty clay loam	CH	A-7-5	0	0	100	100	95-100	95-100	52-76	26-42
	27-36	Silty clay loam, silt loam, loam	CL, CH	A-7-6, A-6	0	0	100	100	95-100	95-100	38-52	17-25
	36-49	Silt loam, loam, loamy fine sand	CL, ML, SC, SM	A-4, A-2, A-6, A-7	0	0	100	95-100	60-90	20-90	18-48	NP-20
	49-60	Stratified loamy sand to silt loam	SC, SM, CL, ML, SC-SM, CL-ML	A-2-4, A-4	0	0-5	90-100	70-95	40-80	15-55	20-25	NP-10
268B:												
Mt. Carroll-----	0-7	Silt loam	CL	A-4, A-6	0	0	100	100	100	95-100	29-39	9-15
	7-10	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	26-34	9-15
	10-55	Silt loam	CL	A-4, A-6	0	0	100	100	100	95-100	27-38	12-19
	55-60	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	26-35	10-16

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
268C2:												
Mt. Carroll-----	0-7	Silt loam	CL	A-4, A-6	0	0	100	100	100	95-100	29-39	9-15
	7-38	Silt loam	CL	A-4, A-6	0	0	100	100	100	95-100	27-38	12-19
	38-60	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	26-35	10-16
272A:												
Edgington-------	0-20	Silt loam	CL, ML, CL-ML	A-4, A-6	0	0	100	100	97-100	95-100	24-37	3-13
	20-31	Silt loam	CL, ML	A-6, A-4	0	0	100	100	97-100	95-100	24-37	7-18
	31-55	Silty clay loam	CL, ML	A-7-6, A-6	0	0	100	100	97-100	95-100	37-46	16-24
	55-60	Silt loam	CL, ML	A-6, A-4	0	0	100	100	97-100	95-100	24-37	7-18
274B:												
Seaton----------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	95-100	95-100	20-45	2-20
	9-60	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
	60-80	Silt loam, silt	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
274C:												
Seaton----------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	95-100	95-100	20-45	2-20
	9-60	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
	60-80	Silt loam, silt	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
274C2:												
Seaton----------	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	95-100	20-35	5-15
	7-47	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
	47-60	Silt loam, silt	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
274D2:												
Seaton----------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	8-52	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	100	90-100	25-40	5-20
	52-60	Silt loam, silt	CL, CL-ML	A-6, A-4	0	0	100	100	100	90-100	25-40	5-20
274D3:												
Seaton----------	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	7-52	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	100	90-100	25-40	5-20
	52-60	Silt loam, silt	CL, CL-ML	A-6, A-4	0	0	100	100	100	90-100	25-40	5-20
274E2:												
Seaton----------	0-8	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	95-100	95-100	20-45	2-20
	8-52	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
	52-60	Silt loam, silt	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
274F:												
Seaton----------	0-9	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7	0	0	100	100	95-100	95-100	20-45	2-20
	9-58	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20
	58-60	Silt loam, silt	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	90-100	25-40	5-20

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
275A:												
Joy----------	0-15	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	95-100	20-40	5-20
	15-51	Silt loam	CL	A-6	0	0	100	100	95-100	95-100	25-40	10-20
	51-60	Silt loam, loam, very fine sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	90-100	40-100	20-35	5-15
275B:												
Joy----------	0-15	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	95-100	95-100	20-40	5-20
	15-51	Silt loam	CL	A-6	0	0	100	100	95-100	95-100	25-40	10-20
	51-60	Silt loam, loam, very fine sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	90-100	40-100	20-35	5-15
277B:												
Port Byron------	0-13	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	5-15
	13-52	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	5-20
	52-60	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	25-40	5-15
	60-77	Silt loam, silt	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	20-30	5-15
	77-89	Silt	ML, CL-ML	A-4	0	0	100	100	95-100	90-100	15-25	NP-5
277C:												
Port Byron------	0-16	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	5-15
	16-40	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	95-100	25-40	5-20
	40-60	Silt loam	CL-ML, CL	A-4, A-6	0	0	100	100	95-100	90-100	25-40	5-15
277C2:												
Port Byron------	0-9	Silt loam	CL	A-4, A-6	0	0	100	100	100	95-100	25-40	7-18
	9-48	Silt loam	CL	A-4, A-6	0	0	100	100	100	95-100	25-40	7-18
	48-60	Silt loam	CL	A-4, A-6	0	0	100	100	100	90-100	25-40	7-17
279A:												
Rozetta---------	0-4	Silt loam	CL	A-6, A-4	0	0	100	100	95-100	95-100	24-35	8-15
	4-11	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	95-100	20-30	5-15
	11-50	Silty clay loam	CL	A-7-6, A-6	0	0	100	100	95-100	95-100	35-50	15-30
	50-60	Silt loam, silty clay loam	CL	A-6, A-4	0	0	100	100	95-100	85-100	25-40	7-20

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
279B:												
Rozetta---------	0-7	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	95-100	24-35	8-15
	7-11	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	95-100	20-30	5-15
	11-55	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	95-100	35-50	15-30
	55-60	Silt loam, silty clay loam	CL	A-4, A-6	0	0	100	100	95-100	85-100	25-40	7-20
280B:												
Fayette---------	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	25-35	5-15
	9-39	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	39-60	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-20
280C:												
Fayette---------	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	25-35	5-15
	9-39	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	39-60	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-20
280C2:												
Fayette---------	0-8	Silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	30-45	10-25
	8-64	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	64-80	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-20
280C3:												
Fayette---------	0-8	Silty clay loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	8-48	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	48-60	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-20
280D2:												
Fayette---------	0-6	Silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	30-45	10-25
	6-48	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	48-60	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-20

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
280D3:												
Fayette---------	0-8	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	95-100	35-45	15-25
	8-36	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	95-100	95-100	35-45	15-25
	36-60	Silt loam	CL	A-6	0	0	100	100	95-100	95-100	30-40	10-20
280F2:												
Fayette---------	0-4	Silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	30-45	10-25
	4-60	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	60-77	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-20
280G2:												
Fayette---------	0-3	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	25-35	5-15
	3-10	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	95-100	20-30	5-15
	10-45	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	45-60	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-20
403E2:												
Elizabeth-------	0-6	Silt loam	CL, ML	A-6, A-7-6	0-1	0-7	87-100	80-100	70-100	55-95	32-47	11-18
	6-11	Cobbly silt loam, silt loam, loam, clay loam	CL, ML	A-6, A-7-6	0-6	0-37	80-100	65-100	57-95	35-95	31-51	12-25
	11-14	Extremely cobbly loam, very cobbly silt loam, very cobbly loam, extremely cobbly clay loam	CL, ML, GC	A-6, A-2-6, A-7-6	0-25	35-55	50-100	35-100	30-95	17-83	29-47	12-24
	14-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
410C2:												
Woodbine--------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	31-41	13-19
	8-18	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	35-47	17-25
	18-43	Clay loam, sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-7-6, A-4, A-6	0	0	90-100	80-100	65-95	40-80	34-46	16-25
	43-48	Silty clay, clay, cherty silty clay, cherty clay	CH, CL	A-7-6	0-6	0-11	85-100	75-100	70-95	60-95	50-78	29-51
	48-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
410D2:												
Woodbine--------	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	31-41	13-19
	7-24	Silt loam, silty clay loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	34-47	16-25
	24-41	Clay loam, sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-7-6, A-4, A-6	0	0	90-100	80-100	65-95	40-80	34-46	16-25
	41-46	Silty clay, clay, cherty silty clay, cherty clay	CH, CL	A-7-6	0-6	0-11	85-100	75-100	70-95	60-95	50-78	29-51
	46-80	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
410D3:												
Woodbine--------	0-6	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	95-100	95-100	37-47	19-25
	6-17	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	95-100	95-100	35-47	17-25
	17-40	Clay loam, sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-7-6, A-4, A-6	0	0	90-100	80-100	65-95	40-80	34-46	16-25
	40-44	Silty clay, clay, cherty silty clay, cherty clay	CH, CL	A-7-6	0-6	0-11	85-100	75-100	70-95	60-95	50-78	29-51
	44-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
410F2:												
Woodbine---------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	31-41	13-19
	8-18	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	35-47	17-25
	18-39	Clay loam, sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-7-6, A-4, A-6	0	0	90-100	80-100	65-95	40-80	34-46	16-25
	39-43	Silty clay, clay, cherty silty clay, cherty clay	CH, CL	A-7-6	0-6	0-11	85-100	75-100	70-95	60-95	50-78	29-51
	43-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
410G2:												
Woodbine---------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	31-41	13-19
	8-19	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-47	17-25
	19-41	Clay loam, sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6, A-7-6	0	0	90-100	80-100	65-95	40-80	34-46	16-25
	41-46	Silty clay, clay, cherty silty clay, cherty clay	CH, CL	A-7-6	0-6	0-11	85-100	75-100	70-95	60-95	50-78	29-51
	46-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
411B:												
Ashdale---------	0-15	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	30-40	8-18
	15-43	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	35-47	17-25
	43-51	Silty clay, clay	CH	A-7-6	0-1	0-5	90-100	80-100	80-100	75-99	35-50	15-30
	51-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
411C2:												
Ashdale---------	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	30-40	8-18
	9-48	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	35-47	17-25
	48-56	Silty clay, clay	CH	A-7-6	0-1	0-5	90-100	80-100	80-100	75-99	35-50	15-30
	56-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
412B:												
Ogle------------	0-17	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-18
	17-39	Silty clay loam, silt loam	CL	A-7-6	0	0	100	95-100	95-100	93-100	35-47	17-25
	39-60	Clay loam, silty clay loam, sandy clay loam	CL	A-6, A-7-6	0	0	95-100	85-100	75-100	58-95	37-46	19-25
412C2:												
Ogle------------	0-9	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-18
	9-41	Silty clay loam, silt loam	CL	A-7-6	0	0	100	95-100	95-100	93-100	35-47	17-25
	41-60	Clay loam, silty clay loam, sandy clay loam	CL	A-6, A-7-6	0	0	95-100	85-100	75-100	58-95	37-46	19-25
412C3:												
Ogle------------	0-5	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	95-100	95-100	37-47	19-25
	5-41	Silty clay loam, silt loam	CL	A-7-6	0	0	100	95-100	95-100	93-100	35-47	17-25
	41-60	Clay loam, silty clay loam, sandy clay loam	CL	A-6, A-7-6	0	0	95-100	85-100	75-100	58-95	37-46	19-25

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
414B:												
Myrtle----------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	33-43	13-18
	8-14	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	24-37	9-18
	14-42	Silty clay loam	CL	A-6, A-7-6	0	0	100	95-100	90-100	85-100	37-47	19-25
	42-60	Clay loam, silty clay loam, sandy clay loam	CL	A-6, A-7-6	0-3	0-5	95-100	85-100	75-100	45-90	37-46	19-25
414C2:												
Myrtle----------	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	33-43	13-18
	7-42	Silty clay loam	CL	A-6, A-7-6	0	0	100	95-100	90-100	85-100	37-47	19-25
	42-60	Clay loam, silty clay loam, sandy clay loam	CL	A-6, A-7-6	0-3	0-5	95-100	85-100	75-100	45-90	37-46	19-25
416C2:												
Durand----------	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	33-43	13-18
	9-22	Silty clay loam	CL	A-6, A-7-6	0	0	100	95-100	90-100	85-100	37-47	19-25
	22-60	Clay loam, sandy loam, gravelly sandy clay loam	CL, GC, SC	A-2-6, A-6, A-7-6	0-1	0-5	80-100	55-95	47-95	30-85	29-46	12-25
416C3:												
Durand----------	0-5	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	95-100	95-100	37-47	19-25
	5-21	Silty clay loam	CL	A-6, A-7-6	0	0	100	95-100	90-100	85-100	37-47	19-25
	21-60	Clay loam, sandy loam, gravelly sandy clay loam	CL, GC, SC	A-2-6, A-6, A-7-6	0-1	0-5	80-100	55-95	47-95	30-85	29-46	12-25
417D3:												
Derinda----------	0-8	Silty clay loam	CL, CL-ML	A-7-6, A-6	0	0	100	95-100	94-100	87-100	37-49	18-24
	8-17	Silty clay loam	CH, CL, MH, ML	A-7-6	0	0	100	95-100	94-100	87-100	44-51	25-29
	17-35	Silty clay, clay	CH, CL	A-7-6	0	0	85-100	75-100	70-100	60-100	48-55	28-32
	35-45	Weathered bedrock	---	---	0	0	90-100	85-100	80-90	65-90	30-55	15-30

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
417E2:												
Derinda---------	0-12	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	94-100	87-100	33-43	14-18
	12-27	Silty clay loam	CH, CL, MH, ML	A-7-6	0	0	100	95-100	94-100	87-100	44-51	25-29
	27-34	Silty clay, clay	CH, CL	A-7-6	0	0	85-100	75-100	70-100	60-100	48-55	28-32
	34-60	Weathered bedrock	---	---	0	0	90-100	85-100	80-90	65-90	30-55	15-30
419B:												
Flagg-----------	0-4	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	33-43	13-18
	4-11	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	24-37	9-18
	11-48	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	94-100	92-100	83-100	35-46	17-25
	48-72	Clay loam, sandy clay loam, silty clay loam	CL	A-6, A-7-6	0	0	95-100	85-100	75-100	45-90	30-44	15-25
419C2:												
Flagg-----------	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	33-43	13-18
	7-37	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	94-100	92-100	83-100	35-46	17-25
	37-60	Clay loam, sandy clay loam, silty clay loam	CL	A-7-6, A-6	0	0	95-100	85-100	75-100	45-90	30-44	15-25
419D2:												
Flagg-----------	0-6	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	33-43	13-18
	6-33	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	94-100	92-100	83-100	35-46	17-25
	33-60	Clay loam, sandy clay loam, silty clay loam	CL	A-7-6, A-6	0	0	95-100	85-100	75-100	45-90	30-44	15-25

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
419D3:												
Flagg	0-5	Silty clay loam	CL	A-6, A-7-6	0	0	100	96-100	94-100	88-100	38-45	19-23
	5-34	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	94-100	92-100	83-100	35-46	17-25
	34-60	Clay loam, sandy clay loam, silty clay loam	CL	A-7-6, A-6	0	0	95-100	85-100	75-100	45-90	30-44	15-25
429C2:												
Palsgrove	0-7	Silt loam	CL	A-6	0	0	100	100	97-100	93-100	30-37	13-17
	7-42	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	98-100	85-100	35-47	17-27
	42-52	Clay, silty clay loam, silty clay	CH, CL	A-7-6, A-7-5	0-2	0-6	93-100	82-94	77-93	67-90	45-95	25-63
	52-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
505D2:												
Dunbarton	0-7	Silt loam	CL	A-4, A-6	0	0-7	85-100	75-100	75-100	60-95	25-35	7-15
	7-14	Silty clay loam, silt loam	CH, CL	A-6, A-7-6	0	0-8	70-100	70-100	70-100	70-95	35-60	15-35
	14-18	Clay, silty clay	CH, CL	A-7-6	0	0-8	70-100	70-100	70-100	70-95	45-90	25-60
	18-60	Weathered bedrock, unweathered bedrock	---	---	---	---	---	---	---	---	---	---
505D3:												
Dunbarton	0-9	Silty clay loam, silt loam	CH, CL	A-6, A-7-6	0	0-8	70-100	70-100	70-100	70-95	35-60	15-35
	9-16	Clay, silty clay	CH, CL	A-7-6	0	0-8	70-100	70-100	70-100	70-95	45-90	25-60
	16-60	Weathered bedrock, unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
505E2:												
Dunbarton-------	0-5	Silt loam	CL	A-4, A-6	0	0-7	85-100	75-100	75-100	60-95	25-35	7-15
	5-10	Silty clay loam, silt loam	CH, CL	A-6, A-7-6	0	0-8	70-100	70-100	70-100	70-95	35-60	15-35
	10-17	Clay, silty clay	CH, CL	A-7-6	0	0-8	70-100	70-100	70-100	70-95	45-90	25-60
	17-60	Weathered bedrock, unweathered bedrock	---	---	---	---	---	---	---	---	---	---
505E3:												
Dunbarton-------	0-9	Silty clay loam, silt loam	CH, CL	A-6, A-7-6	0	0-8	70-100	70-100	70-100	70-95	35-60	15-35
	9-16	Clay, silty clay	CH, CL	A-7-6	0	0-8	70-100	70-100	70-100	70-95	45-90	25-60
	16-60	Weathered bedrock, unweathered bedrock	---	---	---	---	---	---	---	---	---	---
505F2:												
Dunbarton-------	0-6	Silt loam	CL	A-4, A-6	0	0-7	85-100	75-100	75-100	60-95	25-35	7-15
	6-10	Silty clay loam, silt loam	CH, CL	A-6, A-7-6	0	0-8	70-100	70-100	70-100	70-95	35-60	15-35
	10-19	Clay, silty clay	CH, CL	A-7-6	0	0-8	70-100	70-100	70-100	70-95	45-90	25-60
	19-60	Weathered bedrock, unweathered bedrock	---	---	---	---	---	---	---	---	---	---
505G:												
Dunbarton-------	0-2	Silt loam	CL	A-4, A-6	0	0-7	85-100	75-100	75-100	60-95	25-35	7-15
	2-10	Silty clay loam, silt loam	CH, CL	A-6, A-7-6	0	0-8	70-100	70-100	70-100	70-95	35-60	15-35
	10-16	Clay, silty clay	CH, CL	A-7-6	0	0-8	70-100	70-100	70-100	70-95	45-90	25-60
	16-60	Weathered bedrock, unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
506C2:												
Hitt----------	0-15	Silt loam	CL, ML	A-4, A-6	0	0	100	100	100	90-100	37-47	14-18
	15-19	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	98-100	85-100	37-47	19-25
	19-37	Clay loam, sandy clay loam	CL	A-6, A-7-6	0	0-5	94-100	85-100	75-100	55-95	37-48	19-26
	37-42	Silty clay, clay	CH, MH	A-7-6	0-2	0-10	90-100	85-100	80-95	60-90	60-75	40-51
	42-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
506C3:												
Hitt----------	0-7	Silty clay loam	CL	A-7-6, A-6	0	0	100	100	100	90-100	37-45	18-22
	7-16	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	98-100	85-100	37-47	19-25
	16-31	Clay loam, sandy clay loam	CL	A-6, A-7-6	0	0-5	94-100	85-100	75-100	55-95	37-48	19-26
	31-41	Silty clay, clay	CH, MH	A-7-6	0-2	0-10	90-100	85-100	80-95	60-90	60-75	40-51
	41-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
546C2:												
Keltner----------	0-11	Silt loam	CL	A-4, A-6	0	0	100	100	95-100	90-100	30-40	8-15
	11-34	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	90-100	35-45	15-25
	34-43	Clay, silty clay, silty clay loam	CH, CL	A-6, A-7-6	0-2	0-5	95-100	85-100	85-100	75-95	30-55	15-35
	43-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
547C2:												
Eleroy----------	0-11	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	99-100	94-100	33-43	14-18
	11-46	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	99-100	95-100	36-47	17-25
	46-52	Silty clay loam, silty clay, clay	CH, CL	A-6, A-7-6	0	0-5	95-100	85-100	80-100	70-95	44-59	25-36
	52-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
547D2:												
Eleroy----------	0-6	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	99-100	94-100	33-43	14-18
	6-38	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	99-100	95-100	36-47	17-25
	38-46	Silty clay loam, silty clay, clay	CH, CL	A-6, A-7-6	0	0-5	95-100	85-100	80-100	70-95	44-59	25-36
	46-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
564B:												
Waukegan--------	0-13	Silt loam	CL, ML	A-6, A-4	0	0	95-100	95-100	92-100	85-95	25-40	3-10
	13-35	Silt loam, loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	95-99	85-95	25-40	5-15
	35-60	Loamy sand, sandy loam, sand, coarse sand	SP-SM, SP, SM	A-2-4, A-3, A-1-b	0	0	85-100	85-100	50-75	2-30	0-9	NP
564C2:												
Waukegan--------	0-8	Silt loam	CL, ML	A-6, A-4	0	0	95-100	95-100	92-100	85-95	25-40	3-10
	8-25	Silt loam, loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	95-99	85-95	25-40	5-15
	25-60	Sand, coarse sand, loamy sand, sandy loam	SP-SM, SP, SM	A-2-4, A-3	0	0-5	85-100	85-100	50-75	2-30	0-9	NP
565B:												
Tell------------	0-7	Silt loam	CL	A-4	0	0	100	100	90-98	69-88	23-26	8-10
	7-28	Silt loam, silty clay loam	CL	A-6	0	0	100	100	96-99	85-96	22-38	8-21
	28-35	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	90-100	75-92	29-62	17-33	4-17
	35-60	Loamy sand, sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0	100	90-100	71-86	13-33	8-19	NP-7

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
565C2:												
Tell	0-6	Silt loam	CL	A-4	0	0	100	100	90-98	69-88	23-26	8-10
	6-29	Silt loam, silty clay loam	CL	A-6	0	0	100	100	96-99	85-96	22-38	8-21
	29-33	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	90-100	75-92	29-62	17-33	4-17
	33-60	Loamy sand, sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0	100	90-100	71-86	13-33	8-19	NP-7
565D2:												
Tell	0-7	Silt loam	CL	A-4	0	0	100	100	90-98	69-88	23-26	8-10
	7-22	Silt loam, silty clay loam	CL	A-6	0	0	100	100	96-99	85-96	22-38	8-21
	22-26	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	90-100	75-92	29-62	17-33	4-17
	26-60	Loamy sand, sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0	100	90-100	71-86	13-33	8-19	NP-7
565D3:												
Tell	0-6	Silt loam	CL	A-4	0	0	100	100	90-98	69-88	23-26	8-10
	6-24	Silt loam, silty clay loam	CL	A-6	0	0	100	100	96-99	85-96	22-38	8-21
	24-28	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	90-100	75-92	29-62	17-33	4-17
	28-60	Loamy sand, sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0	100	90-100	71-86	13-33	8-19	NP-7
565F2:												
Tell	0-7	Silt loam	CL	A-4	0	0	100	100	90-98	69-88	23-26	8-10
	7-22	Silt loam, silty clay loam	CL	A-6	0	0	100	100	96-99	85-96	22-38	8-21
	22-26	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	90-100	75-92	29-62	17-33	4-17
	26-60	Loamy sand, sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0	100	90-100	71-86	13-33	8-19	NP-7

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
569F2:												
Medary----------	0-5	Silty clay loam	CL	A-6	0	0	100	100	95-100	90-100	39-49	19-25
	5-20	Silty clay, silty clay loam, clay	CH, CL	A-7-6	0	0	100	100	95-100	85-100	45-69	25-44
	20-60	Stratified silty clay to silt loam	CH, CL	A-6, A-7-6	0	0	100	100	90-100	75-95	37-61	18-37
572C2:												
Loran----------	0-9	Silt loam	CL, ML	A-4, A-6	0	0	100	100	95-100	90-100	37-47	13-18
	9-41	Silty clay loam, silt loam, loam	CL	A-6, A-7-6	0	0	100	95-100	95-100	80-100	35-50	15-25
	41-60	Shaly clay, shaly silty clay, clay	CL	A-6, A-7-6	0	0-5	95-100	95-100	90-100	80-100	30-50	15-35
576A:												
Zwingle---------	0-8	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	96-100	78-100	31-43	11-18
	8-11	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	78-100	26-38	9-18
	11-46	Silty clay, silty clay loam, clay	CH	A-7-6	0	0	100	100	95-100	83-100	48-70	27-44
	41-60	Stratified loam to loamy sand	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	90-100	68-90	20-68	18-33	4-13
576B:												
Zwingle---------	0-15	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	96-100	78-100	31-43	11-18
	15-50	Silty clay, silty clay loam, clay	CH	A-7-6	0	0	100	100	95-100	83-100	48-70	27-44
	50-60	Stratified loam to loamy sand	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	90-100	68-90	20-68	18-33	4-13
576C:												
Zwingle---------	0-13	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	96-100	78-100	31-43	11-18
	13-48	Silty clay, silty clay loam, clay	CH	A-7-6	0	0	100	100	95-100	83-100	48-70	27-44
	48-60	Stratified loam to loamy sand	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	90-100	68-90	20-68	18-33	4-13

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
660D2:												
Coatsburg-------	0-15	Silt loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	25-40	5-15
	15-52	Silty clay, clay, silty clay loam	CH	A-7-6	0	0	100	95-100	75-90	65-85	50-70	35-55
	52-60	Loam, clay loam	CH, CL	A-6, A-7-6	0	0-5	95-100	90-100	70-100	50-80	31-46	13-25
660D3:												
Coatsburg-------	0-7	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	85-95	70-90	35-50	15-30
	7-46	Silty clay, clay, silty clay loam	CH	A-7-6	0	0	100	95-100	75-90	65-85	50-70	35-55
	46-60	Loam, clay loam	CH, CL	A-6, A-7-6	0	0-5	95-100	90-100	70-100	50-80	31-46	13-25
675A:												
Greenbush-------	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	25-35	5-15
	9-16	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	25-35	5-15
	16-46	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	46-60	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	11-20
675B:												
Greenbush-------	0-14	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	25-35	5-15
	14-60	Silty clay loam, silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	60-80	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	11-20
675C:												
Greenbush-------	0-6	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	25-35	5-15
	6-46	Silty clay loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	46-60	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	11-20
675C2:												
Greenbush-------	0-6	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	25-35	5-15
	6-46	Silty clay loam	CL	A-6, A-7	0	0	100	100	100	95-100	35-45	15-25
	46-60	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	11-20

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
689B:												
Coloma----------	0-10	Sand	SP-SM, SP, SM	A-3, A-2	0	0	85-100	85-100	50-80	2-15	0-14	NP
	10-27	Sand, loamy sand	SP-SM, SP, SM	A-3, A-2	0	0	85-100	85-100	50-75	2-30	0-14	NP
	27-60	Stratified sand to loamy sand	SM, SP, SP-SM	A-2-4, A-3, A-4	0	0	85-100	85-100	50-100	2-40	0-14	NP
689D:												
Coloma----------	0-12	Sand	SP-SM, SP, SM	A-3, A-2	0	0	85-100	85-100	50-75	2-15	0-14	NP
	12-25	Sand, loamy sand	SP-SM, SP, SM	A-3, A-2	0	0	85-100	85-100	50-75	2-30	0-14	NP
	25-60	Stratified sand to loamy sand	SM, SP, SP-SM	A-2-4, A-3, A-4	0	0	85-100	85-100	50-100	2-40	0-14	NP
689F:												
Coloma----------	0-12	Sand	SP-SM, SP, SM	A-3, A-2	0	0	85-100	85-100	50-75	2-15	0-14	NP
	12-25	Sand, loamy sand	SP-SM, SP, SM	A-3, A-2	0	0	85-100	85-100	50-75	2-30	0-14	NP
	25-60	Stratified sand to loamy sand to sandy loam	SM, SP, SP-SM	A-2-4, A-3, A-4	0	0	85-100	85-100	50-100	2-40	0-14	NP
735D2:												
Casco----------	0-6	Silt loam	CL, CL-ML, ML	A-6, A-4	0	0	95-100	85-100	75-100	55-85	17-29	3-12
	6-15	Clay loam, sandy clay loam, gravelly loam, silty clay loam	CL, GC, SC	A-2-4, A-6, A-7-6	0-2	0-5	80-100	55-100	50-97	30-85	23-47	9-27
	15-60	Stratified sand to gravel	GP, GP-GM, SP, SP-SM	A-1-a, A-2-4, A-3	0-3	0-10	60-90	10-85	5-60	1-15	0-14	NP
Rodman----------	0-6	Gravelly sandy loam	SC-SM, SC, SP-SM	A-1-b, A-2	0	0-2	75-85	55-85	40-70	10-40	15-25	NP-10
	6-10	Gravelly loam, sandy loam, loam	CL, SC, SC-SM, SM	A-1-b, A-2, A-4	0	0-2	70-85	50-85	40-75	20-65	10-30	NP-15
	10-60	Stratified very gravelly coarse sand to sand	SW-SM, SC-SM, SP	A-1-a, A-1-b	0-2	2-5	60-75	22-75	10-40	2-15	6-16	NP-5

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
735D2:												
Fox----------	0-4	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	85-98	70-95	15-30	3-15
	4-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	85-98	70-95	15-30	3-15
	7-22	Silty clay loam, silt loam	CL, ML	A-6, A-7-6	0	0-1	95-100	85-100	75-100	70-95	25-50	10-25
	22-39	Clay loam, sandy clay loam, gravelly loam	CL, ML, SC, SM	A-2-6, A-6, A-7-6	0-1	0-5	65-100	50-100	35-95	30-80	25-45	10-25
	39-60	Stratified gravelly sand to extremely gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1-b, A-1-a, A-3	0-3	0-10	30-100	15-85	10-70	2-10	0-14	NP
735E2:												
Casco----------	0-5	Silt loam	CL, CL-ML, ML	A-4	0	0	95-100	85-100	75-100	55-85	17-29	3-12
	5-13	Clay loam, sandy clay loam, gravelly loam, silty clay loam	CL, GC, SC	A-2-4, A-6, A-7-6	0-2	0-5	80-100	55-100	50-97	30-85	23-47	9-27
	13-60	Stratified sand to gravel	GP, GP-GM, SP, SP-SM	A-1-a, A-2-4, A-3	0-3	0-10	60-90	10-85	5-60	1-15	0-14	NP
Rodman----------	0-6	Gravelly sandy loam	SC-SM, SC, SP-SM	A-1-b, A-2	0	0-2	75-85	55-85	40-70	10-40	15-25	NP-10
	6-10	Gravelly loam, sandy loam, loam	CL, SC, SC-SM, SM	A-1-b, A-2, A-4	0	0-2	70-85	50-85	40-75	20-65	10-30	NP-15
	10-60	Stratified very gravelly coarse sand to sand	SW-SM, SC-SM, SP	A-1-a, A-1-b	0-2	2-5	60-75	22-75	10-40	2-15	6-16	NP-5

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
735E2:												
Fox----------	0-7	Silt loam	CL, CL-ML, ML	A-4, A-6	0	0	95-100	95-100	85-98	70-95	15-30	3-15
	7-21	Silty clay loam, silt loam	CL, ML	A-6, A-7-6	0	0-1	95-100	85-100	75-100	70-95	25-50	10-25
	21-37	Clay loam, sandy clay loam, gravelly loam	CL, ML, SC, SM	A-2-6, A-6, A-7-6	0-1	0-5	65-100	50-100	35-95	30-80	25-45	10-25
	37-60	Stratified gravelly sand to extremely gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1-b, A-1-a, A-3	0-3	0-10	30-100	15-85	10-70	2-10	0-14	NP
764B:												
Coyne----------	0-23	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4, A-6	0	0	100	95-100	60-70	20-50	20-35	3-15
	23-42	Fine sandy loam, loam	SC, SC-SM, SM	A-2-4, A-4, A-6	0	0	100	95-100	60-70	20-50	20-35	3-15
	42-55	Silty clay loam, loam, silt loam	CL	A-6, A-7	0	0	100	100	85-100	80-95	30-45	11-25
	55-60	Gravelly sand, sand	SP-SM, SP, SM	A-1-b	0	0	70-90	60-80	20-45	0-15	15-15	NP-3
785G:												
Lacrescent------	0-12	Cobbly loam	CL, SC	A-6, A-7-6, A-2-4	0	17-30	75-100	60-100	45-90	30-70	27-37	8-16
	12-36	Very cobbly loam, cobbly fine sandy loam, cobbly silt loam	SM, CL, ML, SC	A-1, A-2-4, A-4, A-6	0	30-45	55-85	40-90	35-80	20-70	15-32	2-15
	36-60	Extremely cobbly loam, very cobbly silt loam, very cobbly fine sandy loam	CL, ML, SC, SM	A-1, A-2-4, A-4, A-6	0	40-55	55-85	40-85	35-80	20-70	15-29	2-14

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
798C2:												
Fayette---------	0-6	Silt loam	CL	A-6, A-7	0	0	100	100	100	95-100	30-45	10-25
	6-48	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	100	95-100	35-45	15-25
	48-60	Silt loam	CL	A-6	0	0	100	100	100	95-100	30-40	10-20
Gale------------	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	85-95	24-37	7-13
	9-18	Silt loam, silty clay loam	CL	A-7, A-4, A-6	0	0	100	100	90-100	85-95	32-45	13-23
	18-21	Loam, sandy loam, clay loam	CL, GC	A-2-6, A-4, A-6	0	0	55-100	50-100	30-95	15-80	29-42	12-21
	21-27	Channery sand, sand, fine sand	SP-SC, SC, SP	A-1-b, A-2-4, A-3, A-1-a	0	0-2	55-100	50-100	25-85	3-35	0-26	NP-9
	27-60	Weathered bedrock, unweathered bedrock	---	---	---	---	---	---	---	---	---	---
802B:												
Orthents--------	0-6	Loam	CL	A-6	0-1	0-5	95-100	90-100	85-95	60-90	20-40	10-20
	6-60	Loam, silt loam, clay loam	CL	A-6	0-1	0-5	95-100	90-100	85-95	60-90	20-40	10-20
835G. Earthen dam												
862, 864, 865. Pits												
905F:												
NewGlarus-------	0-5	Silt loam	CL	A-6, A-7-6	0	0	100	100	99-100	94-100	20-37	5-18
	5-22	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	92-100	82-100	82-100	77-100	32-47	13-25
	22-34	Channery silty clay, clay, silty clay	CH, CL	A-7-6	0	0-10	80-100	55-100	52-100	48-100	49-86	29-59
	34-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
905F:												
Lamoille--------	0-6	Silt loam	CL	A-6, A-4	0	0	100	100	95-100	95-100	24-35	8-15
	6-10	Silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	90-100	90-100	95-100	22-38	7-19
	10-38	Cobbly silty clay, silty clay loam, gravelly clay, clay, clay loam	CH, CL, GC, SC	A-7-6	0	5-25	65-95	55-85	50-80	40-70	43-63	25-40
	38-60	Very cobbly silt loam, cobbly clay loam, cobbly loam	GC, SC	A-2-6, A-6, A-7-6	0	10-50	30-75	25-65	15-55	12-45	31-54	13-32
905G:												
NewGlarus-------	0-5	Silt loam	CL	A-6, A-7-6	0	0	100	100	99-100	94-100	20-37	5-18
	5-22	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	92-100	82-100	82-100	77-100	32-47	13-25
	22-34	Channery silty clay, clay, silty clay	CH, CL	A-7-6	0	0-10	80-100	55-100	52-100	48-100	49-86	29-59
	34-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Lamoille--------	0-6	Silt loam	CL	A-6, A-4	0	0	100	100	95-100	95-100	24-35	8-15
	6-10	Silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	90-100	90-100	95-100	22-38	7-19
	10-38	Cobbly silty clay, silty clay loam, gravelly clay, clay, clay loam	CH, CL, GC, SC	A-7-6	0	5-25	65-95	55-85	50-80	40-70	43-63	25-40
	38-60	Very cobbly silt loam, cobbly clay loam, cobbly loam	GC, SC	A-2-6, A-6, A-7-6	0	10-50	30-75	25-65	15-55	12-45	31-54	13-32

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
928C2:												
NewGlarus-------	0-8	Silt loam	CL	A-6, A-7-6	0	0	100	100	99-100	94-100	20-37	5-18
	8-24	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	92-100	82-100	82-100	77-100	32-47	13-25
	24-36	Channery silty clay, clay, silty clay	CH, CL	A-7-6	0	0-10	80-100	55-100	52-100	48-100	49-86	29-59
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Palsgrove-------	0-7	Silt loam	CL	A-6	0	0	100	100	97-100	93-100	30-37	13-17
	7-42	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	98-100	85-100	35-47	17-27
	42-52	Clay, silty clay loam, silty clay	CH, CL	A-7-6, A-7-5	0-2	0-6	93-100	82-94	77-93	67-90	45-95	25-63
	52-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---
928D2:												
NewGlarus-------	0-8	Silt loam	CL	A-6, A-7-6	0	0	100	100	99-100	94-100	20-37	5-18
	8-24	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	92-100	82-100	82-100	77-100	32-47	13-25
	24-36	Channery silty clay, clay, silty clay	CH, CL	A-7-6	0	0-10	80-100	55-100	52-100	48-100	49-86	29-59
	36-60	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Palsgrove-------	0-5	Silt loam	CL	A-6	0	0	100	100	97-100	93-100	30-37	13-17
	5-44	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	98-100	85-100	35-47	17-27
	44-49	Clay, silty clay loam, silty clay	CH, CL	A-7-6, A-7-5	0-2	0-6	93-100	82-94	77-93	67-90	45-95	25-63
	49-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
943F2:												
Seaton----------	0-6	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	100	95-100	20-35	5-15
	6-49	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	100	90-100	25-40	5-20
	49-60	Silt loam, silt	CL, CL-ML	A-6, A-4	0	0	100	100	100	90-100	25-40	5-20
Timula----------	0-6	Silt loam	ML	A-4	0	0	100	100	95-100	85-100	25-35	NP-10
	6-28	Silt loam	ML	A-4	0	0	100	100	95-100	85-100	25-35	NP-10
	28-60	Silt loam, silt	ML	A-4	0	0	100	100	95-100	85-100	25-35	NP-10
943G2:												
Seaton----------	0-6	Silt loam	CL, CL-ML, ML	A-4, A-6, A-7-6	0	0	100	100	95-100	95-100	20-45	2-20
	6-60	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	90-100	25-40	5-20
Timula----------	0-28	Silt loam	ML	A-4	0	0	100	100	95-100	85-100	25-35	NP-10
	28-60	Silt loam, silt	ML	A-4	0	0	100	100	95-100	85-100	25-35	NP-10
952C2:												
Tell----------	0-9	Silt loam	CL	A-4	0	0	100	100	90-98	69-88	23-26	8-10
	9-22	Silt loam, silty clay loam	CL	A-6	0	0	100	100	96-99	85-96	22-38	8-21
	22-26	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	90-100	75-92	29-62	17-33	4-17
	26-60	Loamy sand, sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0	100	90-100	71-86	13-33	8-19	NP-7
Lamont----------	0-9	Fine sandy loam	CL-ML, ML, SC-SM	A-2, A-4	0	0	100	100	80-95	25-55	16-28	1-10
	9-34	Fine sandy loam, loam, sandy clay loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	85-95	30-50	16-33	2-15
	34-60	Loamy fine sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	70-90	5-25	0-23	NP-6

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
952D2:												
Tell	0-7	Silt loam	CL	A-4	0	0	100	100	90-98	69-88	23-26	8-10
	7-22	Silt loam, silty clay loam	CL	A-6	0	0	100	100	96-99	85-96	22-38	8-21
	22-26	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	90-100	75-92	29-62	17-33	4-17
	26-60	Loamy sand, sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0	100	90-100	71-86	13-33	8-19	NP-7
Lamont	0-7	Fine sandy loam	CL-ML, ML, SC-SM	A-2, A-4	0	0	100	100	80-95	25-55	16-28	1-10
	7-45	Fine sandy loam, loam, sandy clay loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	85-95	30-50	16-33	2-15
	45-60	Loamy fine sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	70-90	5-25	0-23	NP-6
952D3:												
Tell	0-6	Silt loam	CL	A-4	0	0	100	100	90-98	69-88	23-26	8-10
	6-25	Silt loam, silty clay loam	CL	A-6	0	0	100	100	96-99	85-96	22-38	8-21
	25-28	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	90-100	75-92	29-62	17-33	4-17
	29-60	Loamy sand, sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0	100	90-100	71-86	13-33	8-19	NP-7
Lamont	0-4	Fine sandy loam	CL-ML, ML, SC-SM	A-2, A-4	0	0	100	100	80-95	25-55	16-28	1-10
	4-43	Fine sandy loam, loam, sandy clay loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	85-95	30-50	16-33	2-15
	43-60	Loamy fine sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	70-90	5-25	0-23	NP-6

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
952F2:												
Tell----------	0-7	Silt loam	CL	A-4	0	0	100	100	90-98	69-88	23-26	8-10
	7-22	Silt loam, silty clay loam	CL	A-6	0	0	100	100	96-99	85-96	22-38	8-21
	22-26	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	100	90-100	75-92	29-62	17-33	4-17
	26-60	Loamy sand, sand	SM, SP, SP-SM	A-1, A-2-4, A-3	0	0	100	90-100	71-86	13-33	8-19	NP-7
Lamont----------	0-7	Fine sandy loam	CL-ML, ML, SC-SM	A-2, A-4	0	0	100	100	80-95	25-55	16-28	1-10
	7-45	Fine sandy loam, loam, sandy clay loam	SC, SC-SM, SM	A-2, A-4	0	0	100	100	85-95	30-50	16-33	2-15
	45-60	Loamy fine sand, loamy sand, sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	70-90	5-25	0-23	NP-6
1076A:												
Otter----------	0-31	Silt loam	CL	A-6, A-4, A-7-6	0	0	100	95-100	90-100	80-100	25-45	7-20
	31-40	Silt loam, loam, silty clay loam	CL	A-7-6, A-6	0	0	100	95-100	90-100	80-100	30-45	10-20
	40-64	Silt loam, sandy loam, silty clay loam	CL, CL-ML, SC, SC-SM	A-6, A-4, A-7-6	0	0	90-100	80-100	55-95	45-85	25-45	5-20
1082A:												
Millington------	0-19	Silt loam	ML, CL	A-6, A-4, A-7	0	0	90-100	90-100	80-100	70-95	30-45	8-17
	19-35	Loam, silty clay loam, clay loam	CL	A-6, A-7	0	0	95-100	90-100	80-100	70-95	28-50	10-22
	35-60	Stratified sandy loam to loam to silt loam to silty clay loam, loam	CL, CL-ML	A-6, A-4, A-7	0	0	80-100	80-100	80-100	60-95	20-45	5-20

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
1107A:												
Sawmill---------	0-29	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-100	30-50	15-30
	29-38	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-100	30-50	15-30
	38-60	Silty clay loam, clay loam, loam	CL	A-6, A-4, A-7	0	0	100	100	85-100	70-95	25-50	8-25
1239A:												
Dorchester------	0-6	Silt loam	CL, CL-ML, ML	A-4	0	0	95-100	95-100	80-100	70-95	25-35	5-10
	6-60	Stratified silt loam, silty clay loam, clay loam	CL, ML	A-6, A-7-6	0	0	100	100	95-100	90-95	35-45	10-20
1451A:												
Lawson----------	0-14	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	85-100	20-35	5-15
	14-33	Silt loam, silty clay loam	CL, CL-ML	A-4	0	0	100	100	90-100	85-100	20-40	5-20
	33-80	Silt loam, silty clay loam	CL	A-6, A-4	0	0	100	100	90-100	60-100	30-40	10-20
3076A:												
Otter-----------	0-43	Silt loam	CL	A-4, A-6, A-7	0	0	100	95-100	90-100	80-100	25-45	7-20
	43-50	Silt loam, silty clay loam	CL	A-7, A-6	0	0	100	95-100	90-100	80-100	30-45	10-20
	50-60	Silt loam, sandy loam, silty clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6, A-7	0	0	90-100	80-100	55-95	45-85	25-45	5-20
3082A:												
Millington------	0-19	Silt loam	ML, CL	A-6, A-4, A-7	0	0	90-100	90-100	80-100	70-95	30-45	8-17
	19-35	Loam, silty clay loam, clay loam	CL	A-6, A-7	0	0	95-100	90-100	80-100	70-95	28-50	10-22
	35-60	Loam, stratified sandy loam to loam to silt loam to silty clay loam	CL, CL-ML	A-6, A-4, A-7	0	0	80-100	80-100	80-100	60-95	20-45	5-20

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
3107+:												
Sawmill---------	0-11	Silt loam	CL	A-6	0	0	100	100	95-100	85-100	25-40	10-20
	11-36	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-100	30-50	15-30
	36-53	Silty clay loam, clay loam, loam	CL	A-4, A-6, A-7	0	0	100	100	95-100	70-95	25-50	8-25
	53-60	Silty clay loam, clay loam, silt loam	CL	A-4, A-6, A-7	0	0	100	100	85-100	70-95	20-50	8-30
3107A:												
Sawmill---------	0-26	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	95-100	85-100	30-50	15-30
	26-54	Silty clay loam	CL	A-6, A-7-6	0	0	100	100	95-100	85-100	30-50	15-30
	54-72	Silty clay loam, clay loam, silt loam	CL, SC	A-4, A-6, A-7-6	0	0	100	90-100	75-100	40-95	20-50	8-30
3333A:												
Wakeland--------	0-8	Silt loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	80-100	20-30	5-10
	8-68	Silt loam	CL, CL-ML, ML	A-4	0	0	100	100	90-100	80-100	20-30	5-10
	68-80	Silt loam, loam	CL, CL-ML, ML	A-4	0	0	100	100	85-100	60-100	20-30	5-10
3415A:												
Orion-----------	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	85-100	80-100	25-35	4-12
	7-22	Stratified very fine sand to silt loam	CL-ML, CL	A-4	0	0	100	100	90-100	70-80	20-30	4-10
	22-60	Silt loam, silty clay loam	CL, CL-ML	A-6, A-4	0	0	100	100	85-100	85-100	20-40	4-18
	60-80	Stratified sand to silt loam	CL-ML, CL	A-4	0	0	80-100	80-100	80-100	80-100	20-30	4-10
3451A:												
Lawson----------	0-14	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	85-100	20-35	5-15
	14-33	Silt loam, silty clay loam	CL, CL-ML	A-4	0	0	100	100	90-100	85-100	20-40	5-20
	33-80	Silty clay loam, silt loam	CL	A-6, A-4	0	0	100	100	90-100	60-100	30-40	10-20

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
3579A:												
Beavercreek-----	0-4	Silt loam	CL-ML, ML	A-4	0	0-6	90-100	80-100	75-100	60-90	17-26	2-10
	4-18	Stratified gravelly silt loam, stratified very gravelly silt loam	SM, CL-ML, CL	A-2-4, A-4	0	1-25	70-98	40-95	35-95	25-95	17-31	2-12
	18-60	Stratified very gravelly loam, stratified extremely gravelly loam to sand	GW-GM, SC-SM, GC	A-1-a, A-2-4	0	20-60	45-80	20-65	15-60	5-50	16-30	2-12
3646L:												
Fluvaquents-----	0-9	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	85-100	25-35	5-15
	9-37	Silt loam, silty clay loam	CL, CL-ML	A-6, A-4	0	0	100	100	90-100	85-95	25-40	5-20
	37-60	Stratified sandy loam to silt loam	CL, CL-ML, SC	A-4, A-6	0	0	100	100	65-95	35-85	25-35	5-12
7076A:												
Otter-----------	0-38	Silt loam	CL	A-6, A-4, A-7-6	0	0	100	95-100	90-100	80-100	25-45	7-20
	38-50	Silt loam, loam, silty clay loam	CL	A-7-6, A-6	0	0	100	95-100	90-100	80-100	30-45	10-20
	50-60	Silt loam, sandy loam, silty clay loam	CL, CL-ML, SC, SC-SM	A-6, A-4, A-7-6	0	0	90-100	80-100	55-95	45-85	25-45	5-20
7082A:												
Millington------	0-21	Clay loam	CL, ML	A-6, A-7-6	0	0	100	95-100	90-100	90-100	35-50	11-20
	21-37	Loam, clay loam, silty clay loam	CL	A-6, A-7-6	0	0	95-100	85-100	80-100	70-95	28-50	10-22
	37-60	Stratified loam to silty clay loam	CL, CL-ML	A-4, A-6, A-7-6	0	0	85-100	85-100	80-100	60-95	20-45	5-20

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
7100A:												
Palms----------	0-28	Muck	PT	A-8	---	---	---	---	---	---	---	---
	28-60	Silt loam, silty clay loam, fine sandy loam	CL, CL-ML	A-4, A-6	0	0	85-100	80-100	70-95	50-90	25-40	5-20
7107+:												
Sawmill---------	0-8	Silt loam	CL	A-6	0	0	100	100	80-100	75-95	25-40	10-20
	8-14	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-100	30-50	15-30
	14-46	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-100	30-50	15-30
	46-60	Silty clay loam, clay loam, loam	CL	A-6, A-4, A-7	0	0	100	100	85-100	70-95	25-50	8-25
7107A:												
Sawmill---------	0-10	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-100	30-50	15-30
	10-35	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-100	30-50	15-30
	35-60	Silty clay loam, clay loam, silt loam	CL	A-6, A-4, A-7	0	0	100	90-100	85-100	70-95	20-50	8-30
7415A:												
Orion----------	0-21	Silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	85-100	25-35	4-12
	21-27	Stratified very fine sand to silt loam	CL-ML, CL	A-4	0	0	100	100	90-100	85-100	20-30	4-10
	27-45	Silt loam, silty clay loam	CL, CL-ML	A-6, A-4	0	0	100	100	85-100	85-100	20-40	4-18
	45-60	Stratified sand to silt loam	CL-ML, CL	A-4, A-2-4	0	0	80-100	80-100	80-100	30-85	20-30	4-10
7451A:												
Lawson----------	0-14	Silt loam	CL, CL-ML	A-6, A-4	0	0	100	100	90-100	85-100	20-40	5-20
	14-33	Silt loam, silty clay loam	CL, CL-ML	A-4	0	0	100	100	90-100	85-100	20-30	5-10
	33-80	Silty clay loam, silt loam	CL	A-6, A-7-6	0	0	100	100	90-100	60-100	20-45	10-25

Table 18.--Engineering Index Properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
7452A:												
Riley----------	0-8	Loam	CL	A-6	0	0	100	100	85-100	60-75	27-38	8-18
	8-24	Clay loam, sandy clay loam, silty clay loam	CL, SC	A-6, A-7-6	0	0	100	100	85-100	45-85	33-47	16-26
	24-31	Loam, clay loam, sandy clay loam	CL, SC	A-6, A-7-6	0	0	100	100	85-100	45-85	33-47	15-25
	31-60	Sand, loamy sand, sandy loam	SC-SM, SM, SP-SM	A-2-4, A-4	0	0	100	100	50-80	15-25	0-17	NP-1
8077A:												
Huntsville------	0-27	Silt loam	CL	A-6	0	0	100	95-100	90-100	85-100	25-40	10-20
	27-52	Silt loam	CL	A-6	0	0	100	95-100	90-100	85-100	20-35	10-20
	52-80	Silt loam, loam	CL, CL-ML, SC, SC-SM	A-2, A-4, A-6	0	0	95-100	90-100	85-95	30-85	20-35	5-20
8239A:												
Dorchester------	0-6	Silt loam	CL, CL-ML, ML	A-4	0	0	95-100	95-100	80-100	70-95	25-35	5-10
	6-60	Stratified silt loam, silty clay loam, clay loam	CL, ML	A-6, A-7-6	0	0	100	100	95-100	90-95	35-45	10-20
8239B:												
Dorchester------	0-6	Silt loam	CL, CL-ML, ML	A-4	0	0	95-100	95-100	80-100	70-95	25-35	5-10
	6-60	Stratified silt loam, silty clay loam, clay loam	CL, ML	A-6, A-7-6	0	0	100	100	95-100	90-95	35-45	10-20

Table 19.--Physical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
21B:														
Pecatonica	0-3	0-7	66-85	15-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	3-10	0-7	66-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.2-0.5	.49	.49			
	10-18	1-7	66-81	18-31	1.20-1.60	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	18-26	25-58	15-40	27-35	1.45-1.65	0.6-2	0.15-0.19	3.0-5.9	0.2-0.5	.28	.28			
	26-68	25-65	17-40	18-35	1.45-1.65	0.6-2	0.15-0.19	3.0-5.9	0.0-0.5	.28	.28			
	68-80	23-65	20-50	15-27	1.45-1.65	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.28	.28			
21C2:														
Pecatonica	0-7	0-7	68-82	18-25	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	7-19	0-7	63-80	20-30	1.30-1.50	0.6-2	0.18-0.22	0.0-2.9	0.5-1.0	.43	.43			
	19-60	20-65	10-60	25-35	1.45-1.65	0.6-2	0.15-0.19	3.0-5.9	0.2-0.5	.28	.28			
21C3:														
Pecatonica	0-7	0-7	61-73	27-32	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.28	.28	4	6	48
	7-55	20-65	10-60	25-35	1.45-1.65	0.6-2	0.15-0.19	3.0-5.9	0.2-0.5	.28	.28			
	55-60	23-65	20-50	15-27	1.45-1.65	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.28	.28			
21D2:														
Pecatonica	0-7	0-7	68-82	18-25	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	7-19	0-7	63-80	20-30	1.30-1.50	0.6-2	0.18-0.22	0.0-2.9	0.5-1.0	.43	.43			
	19-60	20-65	10-60	25-35	1.45-1.65	0.6-2	0.15-0.19	3.0-5.9	0.2-0.5	.28	.28			
21D3:														
Pecatonica	0-7	0-7	61-73	27-32	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.28	.28	4	6	48
	7-55	20-65	10-60	25-35	1.45-1.65	0.6-2	0.15-0.19	3.0-5.9	0.2-0.5	.28	.28			
	55-60	23-65	20-50	15-27	1.45-1.65	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.28	.28			
21F2:														
Pecatonica	0-5	0-7	66-75	25-27	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	1.0-2.0	.43	.43	5	6	48
	5-21	1-7	66-81	18-31	1.20-1.60	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	21-60	25-58	15-40	27-35	1.45-1.65	0.6-2	0.15-0.19	3.0-5.9	0.2-0.5	.28	.28			
29D3:														
Dubuque	0-5	0-7	66-72	27-32	1.30-1.45	0.6-2	0.20-0.22	0.0-2.9	0.2-1.0	.37	.37	2	6	48
	5-21	0-7	58-74	26-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.2-0.5	.37	.37			
	21-26	5-15	25-50	40-60	1.50-1.60	0.06-0.2	0.12-0.15	6.0-8.9	0.0-0.5	.20	.20			
	26-60	---	---	---	---	---	---	---	---	---	---			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
37A:														
Worthen	0-29	0-15	63-88	12-22	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	29-64	0-15	59-85	15-26	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.5-2.0	.49	.49			
	64-80	0-25	51-75	15-24	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.0-1.0	.49	.49			
37B:														
Worthen	0-24	0-15	63-88	12-22	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	24-56	0-15	59-85	15-26	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.5-2.0	.49	.49			
	56-80	0-25	51-75	15-24	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.0-1.0	.49	.49			
37C:														
Worthen	0-24	0-15	63-88	12-22	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	24-56	0-15	59-85	15-26	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.5-2.0	.49	.49			
	56-80	0-25	51-75	15-24	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.0-1.0	.49	.49			
51A:														
Muscatune	0-16	2-7	66-74	24-27	1.25-1.45	0.6-2	0.22-0.24	0.0-2.9	3.5-5.0	.28	.28	5	6	48
	16-22	2-7	58-73	25-35	1.30-1.50	0.6-2	0.18-0.21	3.0-5.9	0.5-1.5	.37	.37			
	22-46	2-7	58-71	27-35	1.35-1.55	0.6-2	0.18-0.20	3.0-5.9	0.5-1.5	.37	.37			
	46-60	2-7	66-83	15-30	1.40-1.60	0.6-2	0.19-0.26	0.0-2.9	0.0-0.2	.49	.49			
51B:														
Muscatune	0-14	2-7	66-83	24-27	1.25-1.45	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.28	.28	5	6	48
	14-42	2-7	58-71	27-35	1.35-1.55	0.6-2	0.18-0.20	3.0-5.9	0.5-1.5	.37	.37			
	42-60	2-7	66-83	15-30	1.35-1.60	0.6-2	0.19-0.26	0.0-5.9	0.0-0.2	.49	.49			
61A:														
Atterberry	0-9	2-7	68-78	15-27	1.25-1.45	0.6-2	0.19-0.26	0.0-2.9	1.5-3.5	.37	.37	5	6	48
	9-17	2-7	69-83	15-27	1.40-1.60	0.6-2	0.17-0.21	0.0-2.9	0.1-1.0	.43	.43			
	17-48	2-7	60-73	25-35	1.35-1.55	0.6-2	0.16-0.20	3.0-5.9	0.1-0.5	.37	.37			
	48-60	2-7	66-80	15-27	1.30-1.50	0.6-2	0.17-0.22	0.0-2.9	0.1-0.5	.49	.49			
61B:														
Atterberry	0-9	2-7	68-78	15-27	1.25-1.45	0.6-2	0.19-0.26	0.0-2.9	1.5-3.5	.37	.37	5	6	48
	9-13	2-7	69-83	15-27	1.40-1.60	0.6-2	0.17-0.21	0.0-2.9	0.1-1.0	.43	.43			
	13-48	2-7	60-74	25-35	1.35-1.55	0.6-2	0.16-0.20	3.0-5.9	0.1-0.5	.37	.37			
	48-60	2-7	45-80	15-27	1.30-1.50	0.6-2	0.17-0.22	0.0-2.9	0.1-0.5	.49	.49			
68A:														
Sable	0-17	0-7	58-73	27-35	1.15-1.35	0.6-2	0.21-0.23	3.0-5.9	5.0-6.0	.24	.24	5	6	48
	17-23	0-7	58-73	27-35	1.20-1.40	0.6-2	0.18-0.20	3.0-5.9	2.0-4.0	.24	.24			
	23-60	0-7	58-76	24-35	1.30-1.50	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
68A+:														
Sable	0-13	0-7	66-80	20-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.28	.28	5	6	48
	13-24	0-7	58-73	27-35	1.20-1.40	0.6-2	0.18-0.20	3.0-5.9	4.0-6.0	.24	.24			
	24-50	0-7	58-76	24-35	1.30-1.50	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37			
	50-60	0-7	66-80	20-28	1.30-1.50	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.49	.49			
81A:														
Littleton	0-9	2-15	58-80	18-27	1.20-1.45	0.6-2	0.20-0.24	0.0-2.9	3.0-4.0	.32	.32	5	6	48
	9-32	0-15	58-78	22-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.5-2.0	.49	.49			
	32-60	10-20	58-72	18-27	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.0-1.0	.49	.49			
81B:														
Littleton	0-9	2-15	58-80	18-27	1.20-1.45	0.6-2	0.20-0.24	0.0-2.9	3.0-4.0	.32	.32	5	6	48
	9-32	0-15	58-78	22-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.5-2.0	.49	.49			
	32-60	10-20	58-72	18-27	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.0-1.0	.49	.49			
86A:														
Osco	0-13	0-7	67-80	20-26	1.25-1.30	0.6-2	0.22-0.24	3.0-5.9	3.0-4.0	.28	.28	5	6	48
	13-38	0-7	58-76	24-35	1.30-1.35	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	38-60	0-7	63-80	20-30	1.35-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
86B:														
Osco	0-14	0-7	67-80	20-26	1.25-1.30	0.6-2	0.22-0.24	3.0-5.9	3.0-4.0	.28	.28	5	6	48
	14-55	0-7	58-76	24-35	1.30-1.35	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	55-60	0-7	63-80	20-30	1.35-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
86C:														
Osco	0-14	0-7	67-80	20-26	1.25-1.30	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.28	.28	5	6	48
	14-43	0-7	58-76	24-35	1.30-1.35	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	43-60	0-7	63-80	20-30	1.35-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
86C2:														
Osco	0-9	0-7	67-80	20-26	1.25-1.30	0.6-2	0.22-0.24	3.0-5.9	2.0-3.0	.37	.37	5	6	48
	9-34	0-7	58-76	24-35	1.30-1.35	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	34-60	0-7	63-80	20-30	1.35-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
86C3:														
Osco	0-7	0-7	58-76	27-35	1.25-1.30	0.6-2	0.22-0.24	3.0-5.9	1.0-3.0	.37	.37	4	6	48
	7-30	0-7	58-76	24-35	1.30-1.35	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	30-60	0-7	66-83	20-30	1.35-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
87A:														
Dickinson	0-8	52-70	12-38	10-18	1.50-1.55	2-6	0.12-0.15	0.0-2.9	1.0-2.0	.15	.15	4	3	86
	8-20	52-70	12-38	10-18	1.50-1.55	2-6	0.12-0.15	0.0-2.9	0.5-1.5	.15	.15			
	20-31	52-75	10-38	10-15	1.45-1.55	2-6	0.12-0.15	0.0-2.9	0.5-1.0	.24	.24			
	31-36	75-90	1-20	4-10	1.55-1.65	6-20	0.08-0.10	0.0-2.9	0.0-0.5	.15	.15			
	36-60	75-95	1-20	4-10	1.60-1.70	6-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.05			
87B:														
Dickinson	0-9	52-75	12-38	10-18	1.50-1.55	2-6	0.12-0.15	0.0-2.9	1.0-2.0	.15	.15	4	3	86
	9-17	52-70	12-38	10-18	1.50-1.55	2-6	0.12-0.15	0.0-2.9	0.5-1.5	.15	.15			
	17-33	52-75	10-38	10-15	1.45-1.55	2-6	0.12-0.15	0.0-2.9	0.5-1.0	.24	.24			
	33-41	75-90	1-20	4-10	1.55-1.65	6-20	0.08-0.10	0.0-2.9	0.0-0.5	.15	.15			
	41-60	75-95	1-20	4-10	1.60-1.70	6-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.05			
87C2:														
Dickinson	0-11	52-70	12-38	10-18	1.50-1.55	2-6	0.12-0.15	0.0-2.9	1.0-2.0	.15	.15	4	3	86
	11-29	52-75	10-38	10-15	1.45-1.55	2-6	0.12-0.15	0.0-2.9	0.5-1.0	.15	.15			
	29-35	75-90	1-20	4-10	1.55-1.65	6-20	0.08-0.10	0.0-2.9	0.0-0.5	.17	.17			
	35-60	75-95	1-20	4-10	1.60-1.70	6-20	0.02-0.04	0.0-2.9	0.0-0.5	.15	.15			
88A:														
Sparta	0-17	75-95	0-22	0-10	1.20-1.40	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.02	.02	5	2	134
	17-31	72-95	0-27	1-8	1.40-1.60	6-20	0.05-0.11	0.0-2.9	0.1-1.0	.10	.10			
	31-72	52-100	0-29	3-16	1.50-1.70	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.17	.17			
88B:														
Sparta	0-14	75-95	0-22	0-10	1.20-1.40	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.02	.02	5	2	134
	14-47	72-95	0-27	1-8	1.40-1.60	6-20	0.05-0.11	0.0-2.9	0.1-1.0	.10	.10			
	47-72	52-100	0-29	3-16	1.40-1.60	6-20	0.06-0.08	0.0-2.9	0.1-1.0	.17	.17			
88C:														
Sparta	0-8	75-95	0-22	0-10	1.20-1.40	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.02	.02	5	2	134
	8-17	75-95	0-22	0-10	1.20-1.40	2-6	0.09-0.12	0.0-2.9	0.5-1.0	.02	.02			
	17-33	72-95	0-27	1-8	1.40-1.60	6-20	0.05-0.11	0.0-2.9	0.1-1.0	.10	.10			
	33-72	52-100	0-29	3-16	1.40-1.60	6-20	0.06-0.08	0.0-2.9	0.1-1.0	.17	.17			
88E:														
Sparta	0-17	75-95	0-22	0-10	1.20-1.40	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.02	.02	5	2	134
	17-32	72-95	0-27	1-8	1.40-1.60	6-20	0.05-0.11	0.0-2.9	0.1-1.0	.10	.10			
	32-60	52-100	0-29	3-16	1.50-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.17	.17			
98A:														
Ade	0-17	70-90	5-27	3-12	1.35-1.55	6-20	0.10-0.12	0.0-2.9	1.0-3.0	.02	.02	5	2	134
	17-36	70-95	1-20	3-12	1.40-1.60	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.15	.15			
	36-80	70-100	0-15	3-15	1.40-1.60	6-20	0.06-0.08	0.0-2.9	0.2-1.0	.15	.15			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
98B:														
Ade	0-10	70-90	5-27	3-12	1.35-1.55	6-20	0.10-0.12	0.0-2.9	1.0-3.0	.02	.02	5	2	134
	10-30	70-95	1-27	3-12	1.40-1.60	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.15	.15			
	30-80	52-100	0-29	3-16	1.40-1.60	6-20	0.06-0.08	0.0-2.9	0.2-1.0	.15	.15			
98D:														
Ade	0-17	70-90	5-27	3-12	1.35-1.55	6-20	0.10-0.12	0.0-2.9	1.0-3.0	.02	.02	5	2	134
	17-36	70-95	1-20	3-12	1.40-1.60	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.15	.15			
	36-80	70-100	0-15	3-15	1.40-1.60	6-20	0.06-0.08	0.0-2.9	0.2-1.0	.15	.15			
125A:														
Selma	0-23	30-50	35-49	17-27	1.40-1.60	0.6-2	0.20-0.24	0.0-2.9	3.0-5.0	.24	.24	5	6	48
	23-53	15-50	27-49	18-30	1.40-1.60	0.6-2	0.15-0.19	3.0-5.9	0.0-2.0	.32	.32			
	53-60	60-90	5-25	1-18	1.60-1.90	2-6	0.07-0.19	0.0-2.9	0.0-1.0	.28	.28			
134A:														
Camden	0-7	2-7	66-83	14-27	1.35-1.55	0.6-2	0.21-0.25	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	7-12	2-7	66-83	14-27	1.35-1.55	0.6-2	0.21-0.25	0.0-2.9	0.1-0.5	.49	.49			
	12-26	2-7	58-71	22-35	1.40-1.60	0.6-2	0.14-0.24	3.0-5.9	0.1-0.5	.37	.37			
	26-53	30-50	28-50	18-30	1.45-1.65	0.6-2	0.11-0.22	0.0-2.9	0.0-0.5	.32	.32			
	53-60	65-80	14-25	5-20	1.40-1.70	0.6-6	0.12-0.22	0.0-2.9	0.0-0.5	.28	.28			
134B:														
Camden	0-9	2-7	66-83	14-27	1.35-1.55	0.6-2	0.21-0.25	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	9-15	2-7	66-83	14-27	1.35-1.55	0.6-2	0.21-0.25	0.0-2.9	0.1-0.5	.49	.49			
	15-34	2-7	58-71	22-35	1.40-1.60	0.6-2	0.14-0.24	3.0-5.9	0.1-0.5	.37	.37			
	34-40	30-50	28-50	18-30	1.45-1.65	0.6-2	0.11-0.22	0.0-2.9	0.0-0.5	.32	.32			
	40-60	65-80	14-25	5-20	1.40-1.70	0.6-6	0.12-0.22	0.0-2.9	0.0-0.5	.28	.28			
134C2:														
Camden	0-7	2-7	66-83	15-27	1.35-1.55	0.6-2	0.19-0.24	0.0-2.9	1.0-2.5	.43	.43	5	6	48
	7-34	2-7	58-71	25-35	1.35-1.55	0.6-2	0.18-0.21	3.0-5.9	0.1-0.5	.37	.37			
	34-43	30-50	28-48	22-30	1.45-1.65	0.6-2	0.11-0.14	0.0-2.9	0.0-0.5	.32	.32			
	43-80	65-80	10-25	5-15	1.45-1.65	2-6	0.06-0.10	0.0-2.9	0.0-0.5	.28	.28			
152A:														
Drummer	0-14	0-15	50-73	27-35	1.10-1.30	0.6-2	0.21-0.23	0.0-2.9	5.0-7.0	.24	.24	5	6	48
	14-41	0-15	50-80	20-42	1.20-1.45	0.6-2	0.21-0.24	3.0-5.9	0.0-1.0	.37	.37			
	41-47	15-55	12-70	15-33	1.30-1.55	0.6-2	0.17-0.20	3.0-5.9	0.0-0.5	.32	.32			
	47-60	15-80	0-75	10-32	1.40-1.70	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.32	.32			
172A:														
Hoopeston	0-14	35-75	17-40	8-18	1.35-1.70	2-6	0.12-0.15	0.0-2.9	2.0-3.0	.15	.15	4	3	86
	14-38	45-75	15-30	10-18	1.45-1.70	2-6	0.12-0.17	0.0-2.9	0.2-1.0	.24	.24			
	38-60	70-95	1-10	2-12	1.50-1.70	6-20	0.05-0.10	0.0-2.9	0.1-0.5	.05	.05			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
175B:														
Lamont	0-9	50-80	10-45	4-15	1.50-1.55	2-6	0.16-0.18	0.0-2.9	0.5-1.0	.20	.20	4	3	86
	9-29	45-85	5-40	5-22	1.45-1.65	2-6	0.14-0.16	0.0-2.9	0.0-0.5	.24	.24			
	29-60	60-95	0-20	2-10	1.65-1.75	6-20	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
175C2:														
Lamont	0-9	50-80	10-45	4-15	1.50-1.55	2-6	0.16-0.18	0.0-2.9	0.5-1.0	.20	.20	5	3	86
	9-34	45-85	5-40	5-22	1.45-1.65	2-6	0.14-0.16	0.0-2.9	0.0-0.5	.24	.24			
	34-60	60-95	0-20	2-10	1.65-1.75	6-20	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
175D2:														
Lamont	0-7	50-80	10-45	4-15	1.50-1.55	2-6	0.16-0.18	0.0-2.9	0.5-1.0	.20	.20	4	3	86
	7-45	45-85	5-40	5-22	1.45-1.65	2-6	0.14-0.16	0.0-2.9	0.0-0.5	.24	.24			
	45-60	60-95	0-20	2-10	1.65-1.75	6-20	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
175D3:														
Lamont	0-4	50-80	10-45	4-15	1.50-1.55	2-6	0.16-0.18	0.0-2.9	0.2-0.8	.24	.24	4	3	86
	4-43	45-85	5-40	5-22	1.45-1.65	2-6	0.14-0.16	0.0-2.9	0.0-0.5	.24	.24			
	43-60	60-95	0-20	2-10	1.65-1.75	6-20	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
175F2:														
Lamont	0-7	50-80	10-45	4-15	1.50-1.55	2-6	0.16-0.18	0.0-2.9	0.5-1.0	.20	.20	4	3	86
	7-45	45-85	5-40	5-22	1.45-1.65	2-6	0.14-0.16	0.0-2.9	0.0-0.5	.24	.24			
	45-60	60-95	0-20	2-10	1.65-1.75	6-20	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
201A:														
Gilford	0-18	30-85	5-45	10-20	1.50-1.70	2-6	0.15-0.21	0.0-2.9	2.0-4.0	.15	.15	4	3	86
	18-32	45-85	5-35	8-17	1.60-1.70	2-6	0.10-0.18	0.0-2.9	0.0-1.0	.24	.24			
	32-60	70-100	0-20	2-10	1.65-1.80	6-20	0.03-0.11	0.0-2.9	0.0-0.5	.05	.05			
224C2:														
Strawn	0-8	5-40	45-65	18-27	1.15-1.45	0.6-2	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	8-23	10-35	40-55	25-35	1.35-1.55	0.6-2	0.15-0.20	3.0-5.9	0.2-1.0	.32	.32			
	23-60	15-45	33-55	22-30	1.50-1.70	0.6-2	0.08-0.12	0.0-2.9	0.2-0.5	.32	.32			
224D2:														
Strawn	0-9	5-40	45-65	18-27	1.15-1.45	0.6-2	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	9-21	10-35	40-55	25-35	1.35-1.55	0.6-2	0.15-0.20	3.0-5.9	0.2-1.0	.32	.32			
	21-60	15-45	33-55	22-30	1.50-1.70	0.6-2	0.08-0.12	0.0-2.9	0.2-0.5	.32	.32			
224D3:														
Strawn	0-8	15-38	35-50	27-35	1.35-1.55	0.6-2	0.15-0.19	3.0-5.9	1.0-2.0	.32	.32	5	6	48
	8-19	10-35	40-55	25-35	1.35-1.55	0.6-2	0.15-0.20	3.0-5.9	0.2-1.0	.32	.32			
	19-60	15-45	33-55	22-30	1.50-1.70	0.6-2	0.08-0.12	0.0-2.9	0.2-0.5	.32	.32			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
224F2:														
Strawn	0-5	5-40	45-65	18-27	1.15-1.45	0.6-2	0.20-0.24	0.0-2.9	1.0-3.0	.32	.32	5	6	48
	5-18	10-35	40-55	25-35	1.35-1.55	0.6-2	0.15-0.20	3.0-5.9	0.2-1.0	.32	.32			
	18-60	15-45	33-55	22-30	1.50-1.70	0.6-2	0.08-0.12	0.0-2.9	0.2-0.5	.32	.32			
227B:														
Argyle	0-7	1-15	65-72	20-27	1.25-1.45	0.6-2	0.23-0.25	0.0-2.9	3.0-4.0	.37	.37	5	6	48
	7-13	5-20	65-74	15-26	1.30-1.50	0.6-2	0.21-0.24	0.0-2.9	0.5-1.0	.43	.43			
	13-25	0-15	58-65	27-35	1.30-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	25-70	25-65	10-40	25-35	1.40-1.60	0.6-2	0.05-0.18	0.0-2.9	0.0-0.5	.24	.28			
	70-84	35-85	1-35	5-30	1.45-1.70	0.6-2	0.15-0.18	0.0-2.9	0.0-0.5	.24	.24			
227C2:														
Argyle	0-7	1-15	65-72	20-27	1.25-1.45	0.6-2	0.23-0.25	0.0-2.9	1.0-3.0	.37	.37	5	6	48
	7-23	0-15	58-65	27-35	1.30-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	23-58	25-65	10-40	25-35	1.40-1.60	0.6-2	0.05-0.18	0.0-2.9	0.0-0.5	.24	.28			
	58-60	35-85	1-35	5-30	1.45-1.70	0.6-2	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
261A:														
Niota	0-9	5-20	53-70	20-27	1.20-1.35	0.2-0.6	0.22-0.24	0.0-2.9	1.0-3.0	.37	.37	3	6	48
	9-16	7-25	50-75	18-25	1.30-1.55	0.2-0.6	0.18-0.22	0.0-2.9	0.0-0.5	.43	.43			
	16-27	2-10	30-60	38-60	1.40-1.60	0.0015-0.06	0.09-0.13	6.0-8.9	0.0-1.0	.32	.32			
	27-36	2-30	30-73	25-40	1.40-1.60	0.2-0.6	0.17-0.22	3.0-5.9	0.0-0.5	.37	.37			
	36-49	1-75	1-87	12-25	1.50-1.70	0.2-2	0.08-0.20	3.0-5.9	0.0-0.5	.32	.32			
	49-60	15-80	0-80	5-20	1.50-1.70	2-6	0.11-0.22	0.0-2.9	0.1-0.5	.28	.28			
268B:														
Mt. Carroll	0-7	0-7	60-85	15-22	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	2.0-3.0	.37	.37	5	5	56
	7-10	0-7	60-85	15-22	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	10-55	0-7	60-85	18-27	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.43	.43			
	55-60	0-7	60-85	16-24	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.49	.49			
268C2:														
Mt. Carroll	0-7	0-7	60-85	15-22	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	2.0-3.0	.37	.37	5	5	56
	7-38	0-7	60-85	18-27	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.43	.43			
	38-60	0-7	60-85	16-24	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.49	.49			
272A:														
Edgington	0-20	2-7	66-83	15-27	1.20-1.40	0.6-2	0.22-0.26	0.0-2.9	4.5-6.0	.28	.28	5	6	48
	20-31	2-7	66-83	15-27	1.40-1.60	0.2-0.6	0.17-0.21	0.0-2.9	0.1-1.0	.43	.43			
	31-55	2-7	58-71	27-35	1.35-1.55	0.6-2	0.18-0.21	3.0-5.9	0.5-1.5	.37	.37			
	55-60	2-7	66-83	15-27	1.40-1.60	0.6-2	0.19-0.26	0.0-2.9	0.0-0.5	.49	.49			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
274B:														
Seaton	0-9	1-7	71-89	10-22	1.10-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	9-60	1-7	66-81	18-27	1.20-1.60	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	60-80	1-7	68-89	10-25	1.20-1.50	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.55	.55			
274C:														
Seaton	0-9	1-7	71-89	10-22	1.10-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	9-60	1-7	66-81	18-27	1.20-1.60	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	60-80	1-7	68-89	10-25	1.20-1.50	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.55	.55			
274C2:														
Seaton	0-7	1-7	71-84	15-22	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	0.5-2.0	.43	.43	5	5	56
	7-47	1-7	66-81	18-27	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	47-60	1-7	68-89	10-25	1.20-1.50	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.55	.55			
274D2:														
Seaton	0-8	1-7	71-84	15-22	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	0.5-2.0	.43	.43	5	5	56
	8-52	1-7	66-81	18-27	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	52-60	1-7	68-89	10-25	1.20-1.50	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.55	.55			
274D3:														
Seaton	0-7	1-7	71-84	15-22	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	0.2-1.0	.43	.43	5	5	56
	7-52	1-7	66-81	18-27	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.43	.43			
	52-60	1-7	68-89	10-25	1.20-1.50	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.55	.55			
274E2:														
Seaton	0-8	1-7	71-89	10-22	1.10-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	8-52	1-7	66-81	18-27	1.20-1.60	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	52-60	1-7	68-89	10-25	1.20-1.50	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.55	.55			
274F:														
Seaton	0-9	1-7	71-89	10-22	1.10-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	9-58	1-7	66-81	18-27	1.20-1.60	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	58-60	1-7	68-89	10-25	1.20-1.50	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.55	.55			
275A:														
Joy	0-15	0-7	68-84	15-25	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.28	.28	5	6	48
	15-51	0-7	66-82	18-27	1.15-1.25	0.6-2	0.20-0.22	0.0-2.9	0.1-1.0	.43	.43			
	51-60	0-45	45-88	12-23	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.0-0.2	.49	.49			
275B:														
Joy	0-15	0-7	68-84	15-25	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.28	.28	5	6	48
	15-51	0-7	66-82	18-27	1.15-1.25	0.6-2	0.20-0.22	0.0-2.9	0.1-1.0	.43	.43			
	51-60	0-45	45-88	12-23	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.0-0.2	.49	.49			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
277B:														
Port Byron----------	0-13	1-7	66-82	18-27	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.28	.28	5	6	48
	13-52	1-7	66-82	18-27	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.43	.43			
	52-60	1-7	66-85	15-27	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.43	.43			
	60-77	1-7	75-88	11-18	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.0-0.2	.55	.55			
	77-89	1-7	81-94	5-12	1.25-1.50	0.6-2	0.18-0.20	0.0-2.9	0.0-0.2	.55	.55			
277C:														
Port Byron----------	0-16	1-6	66-82	18-27	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.28	.28	5	6	48
	16-40	1-6	66-82	18-27	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.43	.43			
	40-60	1-6	66-85	15-27	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.0-0.2	.49	.49			
277C2:														
Port Byron----------	0-9	0-7	66-82	18-27	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	5	6	48
	9-48	0-7	66-82	18-27	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.43	.43			
	48-60	0-7	66-82	18-27	1.20-1.40	0.6-2	0.20-0.22	0.0-2.9	0.0-0.2	.49	.49			
279A:														
Rozetta-------------	0-4	0-7	66-85	15-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	4-11	0-7	66-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.2-0.5	.49	.49			
	11-50	0-7	58-73	27-35	1.35-1.55	0.6-2	0.18-0.22	3.0-5.9	0.2-0.5	.37	.37			
	50-60	0-7	63-80	20-30	1.40-1.60	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.49	.49			
279B:														
Rozetta-------------	0-7	0-7	66-85	15-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	7-11	0-7	66-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.1-1.0	.49	.49			
	11-55	0-7	58-73	27-35	1.35-1.55	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.37	.37			
	55-60	0-7	63-80	20-30	1.40-1.60	0.6-2	0.20-0.22	0.0-2.9	0.0-0.5	.49	.49			
280B:														
Fayette-------------	0-9	0-7	66-85	15-27	1.30-1.35	0.6-2	0.20-0.22	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	9-39	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	39-60	0-7	67-78	22-26	1.45-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
280C:														
Fayette-------------	0-9	0-7	66-85	15-27	1.30-1.35	0.6-2	0.20-0.22	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	9-39	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	39-60	0-7	67-78	22-26	1.45-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
280C2:														
Fayette-------------	0-8	0-7	66-75	25-27	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	1.0-2.0	.43	.43	5	6	48
	8-64	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	64-80	0-7	67-78	22-26	1.45-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
280C3:														
Fayette----------	0-8	0-7	61-73	27-32	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37	4	6	48
	8-48	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	48-60	0-7	67-78	22-26	1.45-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
280D2:														
Fayette----------	0-6	0-7	66-75	25-27	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	1.0-2.0	.43	.43	5	6	48
	6-48	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	48-60	0-7	67-78	22-26	1.45-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
280D3:														
Fayette----------	0-8	0-7	61-73	27-32	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37	4	6	48
	8-36	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	36-60	0-7	67-78	22-26	1.45-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
280F2:														
Fayette----------	0-4	0-7	66-75	25-27	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	1.0-2.0	.43	.43	5	6	48
	4-60	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	60-77	0-7	67-78	22-26	1.45-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
280G2:														
Fayette----------	0-3	0-7	66-85	15-27	1.30-1.35	0.6-2	0.20-0.22	0.0-2.9	2.0-3.0	.43	.43	5	6	48
	3-10	0-7	66-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.1-1.0	.49	.49			
	10-45	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	45-60	0-7	67-78	22-26	1.45-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
403E2:														
Elizabeth----------	0-6	5-30	52-68	18-27	1.15-1.25	0.6-2	0.18-0.24	0.0-2.9	2.5-5.0	.24	.24	2	4L	86
	6-11	5-40	30-68	18-35	1.25-1.45	0.6-2	0.16-0.23	3.0-5.9	1.0-3.0	.20	.24			
	11-14	5-40	30-77	18-35	1.30-1.50	0.6-2	0.02-0.10	0.0-2.9	1.0-2.0	.17	.24			
	14-60	---	---	---	---	0.06-0.6	---	---	---	---	---			
410C2:														
Woodbine----------	0-8	0-7	60-85	20-27	1.15-1.35	0.6-2	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	3	6	48
	8-18	0-7	58-73	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	18-43	25-55	20-50	24-35	1.40-1.60	0.6-2	0.12-0.19	3.0-5.9	0.2-0.5	.32	.32			
	43-48	5-15	30-55	40-70	1.25-1.45	0.06-0.2	0.08-0.12	6.0-8.9	0.2-0.5	.20	.20			
	48-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
410D2:														
Woodbine----------	0-7	0-7	60-85	20-27	1.15-1.35	0.6-2	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	3	6	48
	7-24	0-7	55-85	24-35	1.30-1.50	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37			
	24-41	25-55	20-50	24-35	1.40-1.60	0.6-2	0.12-0.19	3.0-5.9	0.2-0.5	.32	.32			
	41-46	5-15	30-55	40-70	1.25-1.45	0.06-0.2	0.08-0.12	6.0-8.9	0.2-0.5	.20	.20			
	46-80	---	---	---	---	0.01-0.2	---	---	---	---	---			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
410D3:														
Woodbine----------	0-6	0-7	58-72	27-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37	3	6	48
	6-17	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37			
	17-40	25-55	20-50	24-35	1.40-1.60	0.6-2	0.12-0.19	3.0-5.9	0.2-0.5	.32	.32			
	40-44	5-15	30-55	40-70	1.25-1.45	0.06-0.2	0.08-0.12	6.0-8.9	0.2-0.5	.20	.20			
	44-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
410F2:														
Woodbine----------	0-8	0-7	60-85	20-27	1.15-1.35	0.6-2	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	3	6	48
	8-18	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	18-39	25-55	20-50	24-35	1.40-1.60	0.6-2	0.12-0.19	3.0-5.9	0.2-0.5	.32	.32			
	39-43	5-15	30-55	40-70	1.25-1.45	0.06-0.2	0.08-0.12	6.0-8.9	0.2-0.5	.20	.20			
	43-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
410G2:														
Woodbine----------	0-8	0-7	60-85	20-27	1.15-1.35	0.6-2	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	3	6	48
	8-19	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	19-41	25-55	20-50	24-35	1.40-1.60	0.6-2	0.12-0.19	3.0-5.9	0.2-0.5	.32	.32			
	41-46	5-15	30-55	40-70	1.25-1.45	0.06-0.2	0.08-0.12	6.0-8.9	0.2-0.5	.20	.20			
	46-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
411B:														
Ashdale----------	0-15	0-7	65-85	20-27	1.20-1.40	0.6-2	0.22-0.25	0.0-2.9	3.0-5.0	.28	.28	3	6	48
	15-43	0-7	60-75	25-35	1.35-1.60	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	43-51	0-7	30-60	40-60	1.25-1.45	0.06-0.2	0.18-0.20	3.0-5.9	0.0-0.3	.20	.20			
	51-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
411C2:														
Ashdale----------	0-9	0-7	65-85	20-27	1.20-1.40	0.6-2	0.22-0.25	0.0-2.9	3.0-5.0	.32	.32	3	6	48
	9-48	0-7	60-75	25-35	1.35-1.60	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	48-56	0-7	30-60	40-60	1.25-1.45	0.06-0.2	0.18-0.20	3.0-5.9	0.0-0.3	.20	.20			
	56-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
412B:														
Ogle----------	0-17	0-7	60-85	20-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	3.0-5.0	.28	.28	5	6	48
	17-39	0-7	50-75	25-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	39-60	15-50	20-55	27-35	1.45-1.65	0.6-2	0.07-0.10	3.0-5.9	0.0-0.5	.28	.28			
412C2:														
Ogle----------	0-9	0-7	60-85	20-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	3.0-5.0	.32	.32	5	6	48
	9-41	0-7	50-75	25-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	41-60	15-50	20-55	27-35	1.45-1.65	0.6-2	0.07-0.10	3.0-5.9	0.0-0.5	.28	.28			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
412C3:														
Ogle	0-5	0-7	58-72	27-35	1.30-1.45	0.6-2	0.22-0.24	3.0-5.9	0.2-1.0	.37	.37	5	6	48
	5-41	0-7	50-75	25-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	41-60	15-50	20-55	27-35	1.45-1.65	0.6-2	0.07-0.10	3.0-5.9	0.0-0.5	.28	.28			
414B:														
Myrtle	0-8	0-7	60-80	20-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	2.0-3.0	.37	.37	5	6	48
	8-14	0-10	55-80	15-26	1.25-1.40	0.6-2	0.21-0.23	0.0-2.9	0.0-0.5	.43	.43			
	14-42	0-7	50-70	27-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37			
	42-60	10-53	20-55	27-35	1.45-1.65	0.6-2	0.07-0.10	3.0-5.9	0.0-0.5	.28	.28			
414C2:														
Myrtle	0-7	0-7	60-80	20-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-2.0	.37	.37	5	6	48
	7-42	0-7	50-70	27-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37			
	42-60	10-53	20-55	27-35	1.45-1.65	0.6-2	0.07-0.10	3.0-5.9	0.0-0.5	.28	.28			
416C2:														
Durand	0-9	0-7	60-80	20-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	5	6	48
	9-22	0-7	50-70	27-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	22-60	20-60	22-45	18-35	1.40-1.60	0.6-2	0.07-0.19	3.0-5.9	0.0-0.2	.28	.28			
416C3:														
Durand	0-5	0-7	58-72	27-35	1.30-1.45	0.6-2	0.22-0.24	3.0-5.9	0.2-1.0	.43	.43	4	6	48
	5-21	0-7	50-70	27-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.0-0.8	.37	.37			
	21-60	20-60	22-45	18-35	1.40-1.60	0.6-2	0.07-0.19	3.0-5.9	0.0-0.2	.28	.28			
417D3:														
Derinda	0-8	0-10	58-72	27-35	1.30-1.50	0.6-2	0.22-0.24	0.0-2.9	0.5-1.0	.43	.43	3	6	48
	8-17	0-10	50-70	35-40	1.35-1.55	0.06-0.2	0.18-0.20	3.0-5.9	0.2-0.8	.37	.37			
	17-35	1-25	35-54	40-45	1.40-1.60	0.06-0.2	0.09-0.13	3.0-5.9	0.1-0.5	.32	.32			
	35-45	---	---	35-45	1.45-1.70	0.0000-0.06	0.00-0.00	---	---	---	---			
417E2:														
Derinda	0-12	0-10	68-78	22-27	1.30-1.50	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	3	6	48
	12-27	0-10	50-65	35-40	1.35-1.55	0.06-0.2	0.18-0.20	3.0-5.9	0.5-1.0	.37	.37			
	27-34	1-25	35-54	40-45	1.40-1.60	0.06-0.2	0.09-0.13	3.0-5.9	0.1-0.5	.32	.32			
	34-60	---	---	35-45	1.45-1.70	0.0000-0.06	0.00-0.00	---	---	---	---			
419B:														
Flagg	0-4	0-7	60-80	20-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	6	48
	4-11	0-10	55-80	15-26	1.25-1.40	0.6-2	0.21-0.23	0.0-2.9	0.0-0.5	.49	.49			
	11-48	0-15	50-70	25-35	1.30-1.50	0.6-2	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
	48-72	15-58	20-50	22-35	1.45-1.60	0.6-2	0.07-0.10	0.0-2.9	0.0-0.2	.28	.28			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
419C2:														
Flagg	0-7	0-7	60-80	20-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.8-2.5	.43	.43	5	6	48
	7-37	0-15	50-70	25-35	1.30-1.50	0.6-2	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
	37-60	15-58	20-50	22-35	1.45-1.60	0.6-2	0.07-0.10	0.0-2.9	0.0-0.2	.28	.28			
419D2:														
Flagg	0-6	0-7	60-80	20-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.8-2.5	.43	.43	5	6	48
	6-33	0-15	50-70	25-35	1.30-1.50	0.6-2	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
	33-60	15-58	20-50	22-35	1.45-1.60	0.6-2	0.07-0.10	0.0-2.9	0.0-0.2	.28	.28			
419D3:														
Flagg	0-5	0-10	50-70	27-32	1.25-1.45	0.6-2	0.18-0.20	3.0-5.9	0.5-1.0	.37	.37	5	6	48
	5-34	0-15	50-70	25-35	1.30-1.50	0.6-2	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
	34-60	15-58	20-50	22-35	1.45-1.60	0.6-2	0.07-0.10	0.0-2.9	0.0-0.2	.28	.28			
429C2:														
Palsgrove	0-7	1-19	60-72	21-27	1.15-1.35	0.6-2	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	4	6	48
	7-42	1-20	55-70	25-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.3-1.0	.37	.37			
	42-52	10-20	20-65	35-75	1.20-1.40	0.06-0.2	0.08-0.10	6.0-8.9	0.0-0.3	.20	.20			
	52-60	---	---	---	---	0.06-0.6	---	---	---	---	---			
505D2:														
Dunbarton	0-7	0-30	50-70	15-27	1.10-1.60	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	1	6	48
	7-14	0-25	45-65	24-40	1.05-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	14-18	0-20	20-50	40-80	1.25-1.55	0.2-0.6	0.09-0.13	6.0-8.9	0.0-0.2	.20	.20			
	18-60	---	---	---	---	0.06-2	---	---	---	---	---			
505D3:														
Dunbarton	0-9	0-25	45-65	24-40	1.05-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.43	.43	1	6	48
	9-16	0-20	20-50	40-80	1.25-1.55	0.2-0.6	0.09-0.13	6.0-8.9	0.0-0.2	.20	.20			
	16-60	---	---	---	---	0.06-2	---	---	---	---	---			
505E2:														
Dunbarton	0-5	0-30	50-70	15-27	1.10-1.60	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	1	6	48
	5-10	0-25	45-65	24-40	1.05-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	10-17	0-20	20-50	40-80	1.25-1.55	0.2-0.6	0.09-0.13	6.0-8.9	0.0-0.2	.20	.20			
	17-60	---	---	---	---	0.06-2	---	---	---	---	---			
505E3:														
Dunbarton	0-9	0-25	45-65	24-40	1.05-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.43	.43	1	6	48
	9-16	0-20	20-50	40-80	1.25-1.55	0.2-0.6	0.09-0.13	6.0-8.9	0.0-0.2	.20	.20			
	16-60	---	---	---	---	0.06-2	---	---	---	---	---			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
505F2:														
Dunbarton	0-6	0-30	50-70	15-27	1.10-1.60	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	1	6	48
	6-10	0-25	45-65	24-40	1.05-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	10-19	0-20	20-50	40-80	1.25-1.55	0.2-0.6	0.09-0.13	6.0-8.9	0.0-0.2	.20	.20			
	19-60	---	---	---	---	0.06-2	---	---	---	---	---			
505G:														
Dunbarton	0-2	0-30	50-70	15-27	1.10-1.60	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	2	6	48
	2-10	0-25	45-65	24-40	1.05-1.40	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	10-16	0-20	20-50	40-80	1.25-1.55	0.2-0.6	0.09-0.13	6.0-8.9	0.0-0.2	.20	.20			
	16-60	---	---	---	---	0.06-2	---	---	---	---	---			
506C2:														
Hitt	0-15	0-10	65-75	22-27	1.15-1.35	0.6-2	0.22-0.24	0.0-2.9	3.0-5.0	.37	.37	3	6	48
	15-19	0-20	53-65	27-35	1.20-1.50	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37			
	19-37	15-50	23-55	27-37	1.40-1.60	0.6-2	0.15-0.19	3.0-5.9	0.0-0.4	.32	.32			
	37-42	0-15	30-45	55-70	1.30-1.55	0.06-0.2	0.08-0.12	3.0-5.9	0.0-0.2	.20	.20			
	42-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
506C3:														
Hitt	0-7	0-10	55-70	27-32	1.15-1.35	0.6-2	0.22-0.24	0.0-2.9	1.0-2.0	.37	.37	3	6	48
	7-16	0-20	53-65	27-35	1.20-1.50	0.6-2	0.18-0.20	3.0-5.9	0.2-1.0	.37	.37			
	16-31	15-40	23-55	27-37	1.40-1.60	0.6-2	0.15-0.19	3.0-5.9	0.0-0.4	.32	.32			
	31-41	0-15	30-45	55-70	1.30-1.55	0.06-0.2	0.08-0.12	3.0-5.9	0.0-0.2	.20	.20			
	41-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
546C2:														
Keltner	0-11	0-7	66-80	20-27	1.15-1.35	0.6-2	0.22-0.24	0.0-2.9	3.0-4.0	.28	.28	4	6	48
	11-34	0-7	58-73	27-35	1.25-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.37	.37			
	34-43	0-20	35-62	38-50	1.40-1.60	0.06-0.2	0.04-0.06	3.0-5.9	0.0-0.5	.37	.37			
	43-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
547C2:														
Eleroy	0-11	0-7	63-78	22-27	1.25-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	4	6	48
	11-46	0-7	58-75	25-35	1.35-1.55	0.6-2	0.18-0.20	3.0-5.9	0.5-1.0	.37	.37			
	46-52	5-20	30-65	35-50	1.40-1.60	0.0015-0.06	0.11-0.18	3.0-5.9	0.1-0.5	.37	.37			
	52-60	---	---	---	---	0.01-0.2	---	---	---	---	---			
547D2:														
Eleroy	0-6	0-7	63-78	22-27	1.25-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	4	6	48
	6-38	0-7	58-75	25-35	1.35-1.55	0.6-2	0.18-0.20	3.0-5.9	0.5-1.0	.37	.37			
	38-46	5-20	30-65	35-50	1.40-1.60	0.0015-0.06	0.11-0.18	3.0-5.9	0.1-0.5	.37	.37			
	46-60	---	---	---	---	0.01-0.2	---	---	---	---	---			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
564B:														
Waukegan----------	0-13	10-30	50-80	18-27	1.35-1.55	0.6-2	0.22-0.24	0.0-2.9	2.0-5.0	.32	.32	4	6	48
	13-35	10-40	35-75	18-27	1.35-1.55	0.6-2	0.20-0.22	0.0-2.9	1.0-2.0	.43	.43			
	35-60	85-100	0-10	0-10	1.50-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.3	.10	.10			
564C2:														
Waukegan----------	0-8	10-30	50-80	18-27	1.35-1.55	0.6-2	0.22-0.24	0.0-2.9	2.0-5.0	.37	.37	4	6	48
	8-25	10-40	35-75	18-27	1.35-1.55	0.6-2	0.20-0.22	0.0-2.9	1.0-2.0	.37	.37			
	25-60	85-100	0-10	0-10	1.50-1.70	6-20	0.04-0.09	0.0-2.9	0.0-0.3	.10	.10			
565B:														
Tell----------	0-7	15-35	50-70	14-18	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	7-28	10-20	55-76	14-28	1.50-1.60	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
	28-35	45-75	10-40	10-25	1.50-1.60	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.37	.37			
	35-60	75-95	2-25	2-12	1.55-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.15	.15			
565C2:														
Tell----------	0-6	15-35	50-70	14-18	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	6-29	10-20	55-76	14-28	1.50-1.60	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
	29-33	45-75	10-40	10-25	1.50-1.60	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.24	.24			
	33-60	75-95	2-25	2-12	1.55-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.15	.15			
565D2:														
Tell----------	0-7	15-35	50-70	14-18	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	7-22	10-20	55-76	14-28	1.50-1.60	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
	22-26	45-75	10-40	10-25	1.50-1.60	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.37	.37			
	26-60	75-95	2-25	2-12	1.55-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.05	.05			
565D3:														
Tell----------	0-6	15-35	50-70	14-18	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	0.5-2.0	.43	.43	4	5	56
	6-24	10-20	55-76	14-28	1.50-1.60	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
	24-28	45-75	10-40	10-25	1.50-1.60	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.24	.24			
	28-60	75-95	2-25	2-12	1.55-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.05	.05			
565F2:														
Tell----------	0-7	15-35	50-70	14-18	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	7-22	10-20	55-76	14-28	1.50-1.60	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
	22-26	45-75	10-40	10-25	1.50-1.60	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.24	.24			
	26-60	75-95	2-25	2-12	1.55-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.05	.05			
569F2:														
Medary----------	0-5	0-7	58-73	27-35	1.35-1.60	0.2-0.6	0.21-0.23	3.0-5.9	1.0-2.0	.43	.43	3	6	48
	5-20	0-15	40-55	35-60	1.55-1.70	0.06-0.2	0.11-0.20	6.0-8.9	0.0-0.5	.32	.32			
	20-60	0-15	40-75	25-50	1.30-1.60	0.06-0.2	0.12-0.20	6.0-8.9	0.0-0.5	.37	.37			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
572C2:														
Loran----------	0-9	0-7	66-80	20-27	1.10-1.30	0.6-2	0.22-0.24	0.0-2.9	4.0-5.0	.28	.28	4	6	48
	9-41	0-7	45-78	22-35	1.30-1.50	0.6-2	0.18-0.20	3.0-5.9	0.5-2.0	.37	.37			
	41-60	5-35	14-60	35-50	1.50-1.70	0.06-0.2	0.04-0.08	3.0-5.9	0.0-0.5	.32	.32			
576A:														
Zwingle----------	0-8	10-25	50-65	18-27	1.25-1.30	0.6-2	0.20-0.22	0.0-2.9	2.0-3.0	.32	.32	3	6	48
	8-11	10-25	50-65	15-26	1.30-1.50	0.6-2	0.21-0.24	0.0-2.9	0.5-1.0	.37	.37			
	11-46	0-20	40-60	38-60	1.30-1.45	0.0015-0.06	0.12-0.16	6.0-8.9	0.0-1.0	.32	.32			
	41-60	30-85	10-50	8-20	1.45-1.60	2-6	0.08-0.10	0.0-2.9	0.0-1.0	.32	.32			
576B:														
Zwingle----------	0-15	10-25	50-65	18-27	1.25-1.30	0.6-2	0.20-0.22	0.0-2.9	2.0-3.0	.32	.32	3	6	48
	15-50	0-20	40-60	38-60	1.30-1.45	0.0015-0.06	0.12-0.16	6.0-8.9	0.0-1.0	.32	.32			
	50-60	30-85	10-50	8-20	1.45-1.60	2-6	0.08-0.10	0.0-2.9	0.0-1.0	.32	.32			
576C:														
Zwingle----------	0-13	10-25	50-65	18-27	1.25-1.30	0.6-2	0.20-0.22	0.0-2.9	2.0-3.0	.32	.32	3	6	48
	13-48	0-20	40-60	38-60	1.30-1.45	0.0015-0.06	0.12-0.16	6.0-8.9	0.0-1.0	.32	.32			
	48-60	30-85	10-50	8-20	1.45-1.60	2-6	0.08-0.10	0.0-2.9	0.0-1.0	.32	.32			
660D2:														
Coatsburg----------	0-15	5-30	43-75	20-30	1.20-1.40	0.2-0.6	0.22-0.24	3.0-5.9	3.0-4.0	.24	.24	3	6	48
	15-52	15-35	20-50	35-45	1.50-1.70	0.01-0.06	0.09-0.13	6.0-8.9	0.0-1.0	.28	.28			
	52-60	25-50	20-45	20-35	1.55-1.75	0.06-0.2	0.15-0.19	3.0-5.9	0.0-0.5	.28	.28			
660D3:														
Coatsburg----------	0-7	5-20	45-70	27-35	1.25-1.45	0.06-0.2	0.15-0.19	3.0-5.9	1.0-2.0	.32	.32	5	6	48
	7-46	15-35	20-50	35-45	1.50-1.70	0.01-0.06	0.09-0.13	6.0-8.9	0.0-1.0	.28	.28			
	46-60	25-50	20-45	20-35	1.55-1.75	0.06-0.2	0.15-0.19	3.0-5.9	0.0-0.5	.28	.28			
675A:														
Greenbush----------	0-9	0-7	68-85	15-25	1.25-1.30	0.6-2	0.21-0.23	0.0-2.9	2.0-3.0	.37	.37	5	6	48
	9-16	0-7	66-85	15-27	1.30-1.35	0.6-2	0.18-0.20	0.0-2.9	0.5-1.0	.43	.43			
	16-46	0-7	58-74	26-35	1.30-1.35	0.6-2	0.18-0.20	3.0-5.9	0.5-1.0	.37	.37			
	46-60	0-7	66-82	18-27	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
675B:														
Greenbush----------	0-14	0-7	68-82	18-25	1.25-1.30	0.6-2	0.21-0.23	0.0-2.9	2.0-3.0	.37	.37	5	6	48
	14-60	0-7	58-74	26-35	1.30-1.35	0.6-2	0.18-0.20	3.0-5.9	0.5-1.0	.37	.37			
	60-80	0-7	66-82	18-27	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
675C:														
Greenbush----------	0-6	0-7	68-82	18-25	1.25-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-3.0	.37	.37	5	6	48
	6-46	0-7	58-74	26-35	1.30-1.35	0.6-2	0.18-0.20	3.0-5.9	0.5-1.0	.37	.37			
	46-60	0-7	66-82	18-27	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
675C2:														
Greenbush----------	0-6	0-7	68-82	18-25	1.25-1.30	0.6-2	0.21-0.23	0.0-2.9	1.0-3.0	.37	.37	5	6	48
	6-46	0-7	58-74	26-35	1.30-1.35	0.6-2	0.18-0.20	3.0-5.9	0.5-1.0	.37	.37			
	46-60	0-7	66-82	18-27	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
689B:														
Coloma----------	0-10	85-100	0-25	0-10	1.35-1.65	6-20	0.05-0.09	0.0-2.9	0.5-2.0	.02	.02	5	1	250
	10-27	75-100	0-25	0-10	1.35-1.65	6-20	0.05-0.12	0.0-2.9	0.0-0.5	.02	.02			
	27-60	70-90	2-28	2-12	1.50-1.65	2-20	0.03-0.08	0.0-2.9	0.0-0.5	.02	.02			
689D:														
Coloma----------	0-12	85-100	0-25	0-10	1.35-1.65	6-20	0.05-0.09	0.0-2.9	0.5-2.0	.02	.02	5	1	250
	12-25	85-100	0-25	0-10	1.35-1.65	6-20	0.05-0.12	0.0-2.9	0.0-0.5	.02	.02			
	25-60	70-90	2-28	2-12	1.50-1.65	2-20	0.03-0.08	0.0-2.9	0.0-0.5	.02	.02			
689F:														
Coloma----------	0-12	85-100	0-25	0-10	1.35-1.65	6-20	0.05-0.09	0.0-2.9	0.5-2.0	.02	.02	5	1	250
	12-25	85-100	0-25	0-10	1.35-1.65	6-20	0.05-0.12	0.0-2.9	0.0-0.5	.02	.02			
	25-60	70-90	2-28	2-12	1.50-1.65	2-20	0.03-0.08	0.0-2.9	0.0-0.5	.02	.02			
735D2:														
Casco----------	0-6	20-40	50-60	10-20	1.35-1.55	0.6-2	0.19-0.24	0.0-2.9	1.0-3.0	.32	.32	3	5	56
	6-15	25-50	20-45	18-35	1.55-1.65	0.6-2	0.09-0.19	3.0-5.9	0.0-0.5	.32	.32			
	15-60	90-100	0-8	0-2	1.30-1.70	20-100	0.02-0.04	0.0-2.9	0.0-0.5	.10	.10			
Rodman----------	0-6	50-75	10-25	5-20	1.10-1.40	2-6	0.09-0.12	0.0-2.9	2.0-4.0	.05	.15	3	8	0
	6-10	25-60	30-50	5-25	1.10-1.50	2-6	0.09-0.12	0.0-2.9	0.0-2.0	.28	.32			
	10-60	85-100	0-15	0-10	1.60-1.70	20-100	0.02-0.04	0.0-2.9	0.0-0.5	.02	.05			
Fox----------	0-4	5-30	50-80	15-25	1.30-1.50	0.6-2	0.17-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	4-7	5-30	50-80	15-25	1.35-1.55	0.6-2	0.16-0.23	0.0-2.9	0.2-1.0	.49	.49			
	7-22	5-30	50-77	18-35	1.50-1.65	0.6-2	0.10-0.22	3.0-5.9	0.2-0.5	.32	.32			
	22-39	20-75	5-50	18-35	1.55-1.65	0.6-2	0.10-0.19	3.0-5.9	0.0-0.5	.28	.28			
	39-60	90-98	0-10	0-2	1.45-1.70	20-100	0.02-0.07	0.0-2.9	0.0-0.5	.02	.05			
735E2:														
Casco----------	0-5	20-40	50-60	10-20	1.35-1.55	0.6-2	0.19-0.24	0.0-2.9	1.0-3.0	.32	.32	3	5	56
	5-13	25-50	20-45	18-35	1.55-1.65	0.6-2	0.09-0.19	3.0-5.9	0.0-0.5	.32	.32			
	13-60	90-100	0-8	0-2	1.30-1.70	20-100	0.02-0.04	0.0-2.9	0.0-0.5	.10	.10			
Rodman----------	0-6	50-75	10-25	5-20	1.10-1.40	2-6	0.09-0.12	0.0-2.9	2.0-4.0	.05	.15	3	8	0
	6-10	25-60	30-50	5-25	1.10-1.50	2-6	0.09-0.12	0.0-2.9	0.0-2.0	.28	.32			
	10-60	85-100	0-15	0-10	1.60-1.70	20-100	0.02-0.04	0.0-2.9	0.0-0.5	.02	.05			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
735E2:														
Fox	0-7	5-30	50-80	15-25	1.30-1.50	0.6-2	0.17-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	7-21	5-30	50-77	18-35	1.50-1.65	0.6-2	0.10-0.22	3.0-5.9	0.2-0.5	.32	.32			
	21-37	20-75	5-50	18-35	1.55-1.65	0.6-2	0.10-0.19	3.0-5.9	0.0-0.5	.28	.28			
	37-60	90-98	0-10	0-2	1.45-1.70	20-100	0.02-0.07	0.0-2.9	0.0-0.5	.02	.05			
764B:														
Coyne	0-23	45-80	2-50	5-18	1.45-1.60	2-6	0.16-0.17	0.0-2.9	2.0-4.0	.15	.15	4	3	86
	23-42	45-80	2-50	5-18	1.40-1.60	0.6-2	0.15-0.19	0.0-2.9	0.0-1.0	.24	.24			
	42-55	10-40	35-70	18-35	1.35-1.55	0.2-0.6	0.15-0.20	3.0-5.9	0.0-0.5	.37	.37			
	55-60	85-100	0-15	2-10	1.70-1.90	6-20	0.02-0.04	0.0-2.9	0.0-0.5	.02	.05			
785G:														
Lacrescent	0-12	30-52	28-50	18-33	1.25-1.40	0.6-2	0.15-0.22	0.0-2.9	3.0-5.0	.20	.24	5	6	38
	12-36	20-60	20-60	8-23	1.30-1.50	0.6-6	0.06-0.09	0.0-2.9	0.5-2.0	.43	.49			
	36-60	20-60	20-60	8-20	1.30-1.50	2-6	0.05-0.08	0.0-2.9	0.0-0.5	.37	.49			
798C2:														
Fayette	0-6	0-7	66-75	25-27	1.35-1.45	0.6-2	0.18-0.20	3.0-5.9	1.0-2.0	.43	.43	5	6	48
	6-48	0-7	58-75	25-35	1.30-1.45	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.37	.37			
	48-60	0-7	67-78	22-26	1.45-1.50	0.6-2	0.18-0.20	3.0-5.9	0.0-0.5	.49	.49			
Gale	0-9	0-7	73-88	12-20	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	3	5	56
	9-18	0-7	61-80	20-32	1.45-1.55	0.6-2	0.18-0.22	3.0-5.9	0.5-1.0	.43	.43			
	18-21	25-60	22-50	18-30	1.45-1.65	0.6-2	0.08-0.18	3.0-5.9	0.0-0.5	.20	.20			
	21-27	88-100	0-10	1-10	1.55-1.70	2-20	0.02-0.08	0.0-2.9	0.0-0.5	.05	.15			
	27-60	---	---	---	---	0.2-0.6	---	---	---	---	---			
802B:														
Orthents	0-6	30-45	25-48	22-30	1.70-1.75	0.2-0.6	0.18-0.22	3.0-5.9	0.5-2.0	.43	.43	5	6	48
	6-60	28-45	25-50	22-30	1.70-1.80	0.2-0.6	0.16-0.20	3.0-5.9	0.2-1.0	.43	.43			
835G.														
Earthen dam														
862, 864, 865.														
Pits														
905F:														
NewGlarus	0-5	0-7	63-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.37	.37	4	5	56
	5-22	0-7	53-75	20-35	1.25-1.45	0.2-2	0.18-0.22	3.0-5.9	0.5-1.0	.37	.37			
	22-34	0-15	20-50	40-80	1.25-1.55	0.06-0.2	0.09-0.13	6.0-8.9	0.0-0.5	.37	.32			
	34-60	---	---	---	---	0.06-2	---	---	---	---	---			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
905F:														
Lamoille	0-6	0-7	66-85	15-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	3	5	56
	6-10	0-7	66-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.2-0.5	.49	.49			
	10-38	5-30	30-60	35-55	1.40-1.60	0.06-0.6	0.12-0.16	3.0-5.9	0.0-0.5	.15	.20			
	38-60	10-40	40-65	20-45	1.30-1.50	0.2-0.6	0.07-0.16	3.0-5.9	0.0-0.3	.43	.49			
905G:														
NewGlarus	0-5	0-7	63-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.37	.37	4	5	56
	5-22	0-7	53-75	20-35	1.25-1.45	0.2-2	0.18-0.22	3.0-5.9	0.5-1.0	.37	.37			
	22-34	0-15	20-50	40-80	1.25-1.55	0.06-0.2	0.09-0.13	6.0-8.9	0.0-0.5	.37	.32			
	34-60	---	---	---	---	0.06-2	---	---	---	---	---			
Lamoille	0-6	0-7	66-85	15-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	3	5	56
	6-10	0-7	66-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	0.2-0.5	.49	.49			
	10-38	5-30	30-60	35-55	1.40-1.60	0.06-0.6	0.12-0.16	3.0-5.9	0.0-0.5	.15	.20			
	38-60	10-40	40-65	20-45	1.30-1.50	0.2-0.6	0.07-0.16	3.0-5.9	0.0-0.3	.43	.49			
928C2:														
NewGlarus	0-8	0-7	63-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.37	.37	4	5	56
	8-24	0-7	53-75	20-35	1.25-1.45	0.2-2	0.18-0.22	3.0-5.9	0.5-1.0	.37	.37			
	24-36	0-15	20-50	40-80	1.25-1.55	0.06-0.2	0.09-0.13	6.0-8.9	0.0-0.5	.37	.32			
	36-60	---	---	---	---	0.06-2	---	---	---	---	---			
Palsgrove	0-7	1-19	60-72	21-27	1.15-1.35	0.6-2	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	4	6	48
	7-42	1-20	55-70	25-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.3-1.0	.37	.37			
	42-52	10-20	20-65	35-75	1.20-1.40	0.06-0.2	0.08-0.10	6.0-8.9	0.0-0.3	.20	.20			
	52-60	---	---	---	---	0.06-0.6	---	---	---	---	---			
928D2:														
NewGlarus	0-8	0-7	63-88	12-27	1.20-1.40	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.37	.37	4	5	56
	8-24	0-7	53-75	20-35	1.25-1.45	0.2-2	0.18-0.22	3.0-5.9	0.5-1.0	.37	.37			
	24-36	0-15	20-50	40-80	1.25-1.55	0.06-0.2	0.09-0.13	6.0-8.9	0.0-0.5	.37	.32			
	36-60	---	---	---	---	0.06-2	---	---	---	---	---			
Palsgrove	0-5	1-19	60-72	21-27	1.15-1.35	0.6-2	0.22-0.24	0.0-2.9	1.0-2.0	.43	.43	4	6	48
	5-44	1-20	55-70	25-35	1.40-1.60	0.6-2	0.18-0.20	3.0-5.9	0.3-1.0	.37	.37			
	44-49	10-20	20-65	35-75	1.20-1.40	0.06-0.2	0.08-0.10	6.0-8.9	0.0-0.3	.20	.20			
	49-60	---	---	---	---	0.06-0.6	---	---	---	---	---			
943F2:														
Seaton	0-6	1-7	71-84	15-22	1.10-1.20	0.6-2	0.22-0.24	0.0-2.9	0.5-2.0	.43	.43	5	5	56
	6-49	1-7	66-81	18-27	1.15-1.30	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
	49-60	1-7	68-89	10-25	1.20-1.50	0.6-2	0.20-0.22	0.0-2.9	0.2-0.5	.55	.55			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
943F2:														
Timula	0-6	0-7	75-89	10-18	1.30-1.60	0.6-2	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	5	5	56
	6-28	0-7	75-89	10-18	1.30-1.60	0.6-2	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43			
	28-60	0-7	75-89	10-18	1.40-1.60	0.6-2	0.18-0.20	0.0-2.9	0.2-0.5	.55	.55			
943G2:														
Seaton	0-6	0-7	71-89	10-22	1.10-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	6-60	0-7	66-81	18-27	1.20-1.60	0.6-2	0.20-0.22	0.0-2.9	0.5-1.0	.43	.43			
Timula	0-28	0-7	75-89	10-18	1.30-1.60	0.6-2	0.20-0.24	0.0-2.9	1.0-2.0	.43	.43	5	5	56
	28-60	0-7	75-89	10-18	1.40-1.60	0.6-2	0.18-0.20	0.0-2.9	0.2-0.5	.55	.55			
952C2:														
Tell	0-9	15-35	50-70	14-18	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	9-22	10-20	55-76	14-28	1.50-1.60	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
	22-26	45-75	10-40	10-25	1.50-1.60	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.24	.24			
	26-60	75-95	2-25	2-12	1.55-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.05	.05			
Lamont	0-9	50-80	10-45	4-15	1.50-1.55	2-6	0.16-0.18	0.0-2.9	0.5-1.0	.20	.20	4	3	86
	9-34	45-85	5-40	5-22	1.45-1.65	2-6	0.14-0.16	0.0-2.9	0.0-0.5	.24	.24			
	34-60	60-95	0-20	2-10	1.65-1.75	6-20	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
952D2:														
Tell	0-7	15-35	50-70	14-18	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	7-22	10-20	55-76	14-28	1.50-1.60	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
	22-26	45-75	10-40	10-25	1.50-1.60	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.24	.24			
	26-60	75-95	2-25	2-12	1.55-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.05	.05			
Lamont	0-7	50-80	10-45	4-15	1.50-1.55	2-6	0.16-0.18	0.0-2.9	0.5-1.0	.20	.20	4	3	86
	7-45	45-85	5-40	5-22	1.45-1.65	2-6	0.14-0.16	0.0-2.9	0.0-0.5	.24	.24			
	45-60	60-95	0-20	2-10	1.65-1.75	6-20	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
952D3:														
Tell	0-6	15-35	50-70	14-18	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	0.5-2.0	.43	.43	3	5	56
	6-25	10-20	55-76	14-28	1.50-1.60	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
	25-28	45-75	10-40	10-25	1.50-1.60	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.24	.24			
	29-60	75-95	2-25	2-12	1.55-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.05	.05			
Lamont	0-4	50-80	10-45	4-15	1.50-1.55	2-6	0.16-0.18	0.0-2.9	0.5-1.0	.24	.24	4	3	86
	4-43	45-85	5-40	5-22	1.45-1.65	2-6	0.14-0.16	0.0-2.9	0.0-0.5	.24	.24			
	43-60	60-95	0-20	2-10	1.65-1.75	6-20	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
952F2:														
Tell	0-7	15-35	50-70	14-18	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	4	5	56
	7-22	10-20	55-76	14-28	1.50-1.60	0.6-2	0.18-0.22	3.0-5.9	0.0-0.5	.43	.43			
	22-26	45-75	10-40	10-25	1.50-1.60	0.6-2	0.11-0.19	0.0-2.9	0.0-0.5	.24	.24			
	26-60	75-95	2-25	2-12	1.55-1.70	6-20	0.04-0.07	0.0-2.9	0.0-0.5	.05	.05			
Lamont	0-7	50-80	10-45	4-15	1.50-1.55	2-6	0.16-0.18	0.0-2.9	0.5-1.0	.20	.20	4	3	86
	7-45	45-85	5-40	5-22	1.45-1.65	2-6	0.14-0.16	0.0-2.9	0.0-0.5	.24	.24			
	45-60	60-95	0-20	2-10	1.65-1.75	6-20	0.09-0.11	0.0-2.9	0.0-0.5	.17	.17			
1076A:														
Otter	0-31	0-15	58-82	18-27	1.10-1.25	0.6-2	0.22-0.24	0.0-2.9	3.0-5.0	.32	.32	5	6	48
	31-40	0-15	40-82	18-27	1.20-1.45	0.6-2	0.17-0.22	3.0-5.9	1.0-3.0	.49	.49			
	40-64	5-60	32-80	15-28	1.30-1.55	0.6-2	0.15-0.20	0.0-2.9	0.5-2.0	.49	.49			
1082A:														
Millington	0-19	0-40	50-75	20-27	1.40-1.60	0.6-2	0.20-0.24	0.0-2.9	4.0-6.0	.32	.32	5	4L	86
	19-35	10-50	25-65	18-35	1.40-1.60	0.6-2	0.17-0.20	3.0-5.9	1.0-3.0	.32	.32			
	35-60	10-70	10-70	15-35	1.50-1.70	0.6-2	0.14-0.20	3.0-5.9	0.1-2.0	.32	.32			
1107A:														
Sawmill	0-29	2-9	56-71	27-35	1.20-1.40	0.6-2	0.21-0.23	3.0-5.9	4.0-5.0	.28	.28	5	6	48
	29-38	3-10	55-70	27-35	1.20-1.40	0.6-2	0.21-0.23	3.0-5.9	1.0-3.0	.32	.32			
	38-60	5-25	40-70	25-35	1.30-1.45	0.6-2	0.17-0.20	3.0-5.9	0.0-2.0	.32	.32			
1239A:														
Dorchester	0-6	10-40	50-70	11-30	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	0.5-2.0	.37	.37	5	4L	86
	6-60	10-40	30-80	18-30	1.25-1.40	0.6-2	0.22-0.24	3.0-5.9	1.0-4.0	.49	.49			
1451A:														
Lawson	0-14	0-15	58-90	10-27	1.20-1.55	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	14-33	0-15	55-90	10-30	1.20-1.55	0.6-2	0.18-0.22	0.0-2.9	2.0-4.0	.32	.32			
	33-80	5-40	30-77	18-30	1.55-1.65	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.49	.49			
3076A:														
Otter	0-43	0-15	58-82	18-27	1.10-1.25	0.6-2	0.22-0.24	0.0-2.9	3.0-5.0	.32	.32	5	6	48
	43-50	0-15	58-82	18-27	1.20-1.45	0.6-2	0.17-0.22	3.0-5.9	1.0-3.0	.49	.49			
	50-60	5-45	32-80	15-28	1.30-1.55	0.6-2	0.15-0.20	0.0-2.9	0.5-2.0	.49	.49			
3082A:														
Millington	0-19	0-40	50-75	20-27	1.40-1.60	0.6-2	0.20-0.24	0.0-2.9	4.0-6.0	.32	.32	5	4L	86
	19-35	10-50	25-65	18-35	1.40-1.60	0.6-2	0.17-0.20	3.0-5.9	1.0-3.0	.32	.32			
	35-60	10-70	10-70	15-35	1.50-1.70	0.6-2	0.14-0.20	3.0-5.9	0.1-2.0	.32	.32			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
3107+:														
Sawmill	0-11	0-15	58-82	18-27	1.25-1.40	0.6-2	0.22-0.24	0.0-2.9	4.0-5.0	.32	.32	5	6	48
	11-36	2-9	59-71	27-35	1.20-1.40	0.6-2	0.21-0.23	3.0-5.9	1.0-3.0	.28	.28			
	36-53	3-25	45-72	25-35	1.30-1.45	0.6-2	0.17-0.20	3.0-5.9	0.0-2.0	.32	.32			
	53-60	5-25	40-77	18-35	1.35-1.50	0.6-2	0.15-0.19	3.0-5.9	0.0-1.0	.32	.32			
3107A:														
Sawmill	0-26	2-9	59-71	27-35	1.20-1.40	0.6-2	0.21-0.23	3.0-5.9	4.0-5.0	.28	.28	5	6	48
	26-54	3-25	50-72	27-35	1.20-1.40	0.6-2	0.21-0.23	3.0-5.9	1.0-4.0	.32	.32			
	54-72	5-25	40-76	18-35	1.35-1.50	0.6-2	0.15-0.19	3.0-5.9	0.2-1.0	.32	.32			
3333A:														
Wakeland	0-8	5-15	70-80	10-18	1.30-1.50	0.6-2	0.20-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	8-68	5-15	70-80	10-18	1.30-1.50	0.6-2	0.20-0.24	0.0-2.9	0.2-0.8	.55	.55			
	68-80	5-45	45-75	10-20	1.30-1.50	0.6-2	0.18-0.24	0.0-2.9	0.1-0.5	.55	.55			
3415A:														
Orion	0-7	1-15	67-89	10-18	1.20-1.30	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	7-22	2-90	10-88	9-18	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-3.0	.55	.55			
	22-60	2-15	55-88	10-30	1.25-1.45	0.6-2	0.18-0.22	0.0-2.9	3.0-8.0	.37	.37			
	60-80	2-90	10-88	9-18	1.20-1.40	0.6-2	0.18-0.22	0.0-2.9	0.0-0.5	.37	.37			
3451A:														
Lawson	0-14	0-15	58-90	10-27	1.20-1.55	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.32	.32	5	5	56
	14-33	0-15	55-90	10-30	1.20-1.55	0.6-2	0.18-0.22	0.0-2.9	2.0-4.0	.32	.32			
	33-80	5-40	30-77	18-30	1.55-1.65	0.6-2	0.18-0.20	3.0-5.9	0.0-1.0	.49	.49			
3579A:														
Beavercreek	0-4	10-30	60-72	10-18	1.30-1.45	2-6	0.20-0.22	0.0-2.9	2.0-3.0	.24	.24	3	5	56
	4-18	10-40	40-80	5-18	1.40-1.50	2-6	0.14-0.18	0.0-2.9	0.5-1.0	.17	.43			
	18-60	30-90	5-50	5-18	1.40-1.50	2-6	0.04-0.08	0.0-2.9	0.0-0.5	.17	.43			
3646L:														
Fluvaquents	0-9	1-15	58-84	15-27	1.35-1.45	0.6-2	0.22-0.24	0.0-2.9	2.0-4.0	.37	.37	5	6	48
	9-37	1-15	55-81	18-30	1.35-1.45	0.6-2	0.20-0.24	3.0-5.9	0.5-1.0	.49	.49			
	37-60	1-45	49-84	15-27	1.35-1.45	0.6-2	0.12-0.20	0.0-2.9	0.5-1.0	.49	.49			
7076A:														
Otter	0-38	0-15	58-82	18-27	1.10-1.25	0.6-2	0.22-0.24	0.0-2.9	3.0-10	.32	.32	5	6	48
	38-50	0-30	40-82	18-27	1.20-1.45	0.6-2	0.17-0.22	3.0-5.9	1.0-3.0	.49	.49			
	50-60	5-60	32-80	15-28	1.30-1.55	0.6-2	0.15-0.20	0.0-2.9	0.5-2.0	.49	.49			
7082A:														
Millington	0-21	20-45	25-50	27-35	1.40-1.60	0.6-2	0.17-0.23	3.0-5.9	4.0-6.0	.24	.24	5	4L	86
	21-37	15-50	25-55	18-35	1.40-1.60	0.6-2	0.17-0.20	3.0-5.9	1.0-3.0	.32	.32			
	37-60	15-50	35-60	18-35	1.50-1.70	0.6-2	0.14-0.20	3.0-5.9	0.1-2.0	.32	.32			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
7100A:														
Palms	0-28	---	---	0-0	0.25-0.45	0.2-6	0.35-0.45	---	75-99	---	---	2	2	134
	28-60	15-55	35-70	7-35	1.45-1.75	0.2-2	0.14-0.22	0.0-2.9	0.0-0.0	.32	.32			
7107+:														
Sawmill	0-8	0-15	58-82	18-27	1.25-1.40	0.6-2	0.22-0.24	0.0-2.9	4.0-5.0	.32	.32	5	6	48
	8-14	2-9	59-71	27-35	1.20-1.40	0.6-2	0.21-0.23	3.0-5.9	1.0-3.0	.28	.28			
	14-46	3-25	45-72	27-35	1.20-1.40	0.6-2	0.21-0.23	3.0-5.9	1.0-3.0	.32	.32			
	46-60	5-25	40-77	25-35	1.30-1.45	0.6-2	0.17-0.20	3.0-5.9	0.0-2.0	.32	.32			
7107A:														
Sawmill	0-10	2-9	56-71	27-35	1.20-1.40	0.6-2	0.21-0.23	3.0-5.9	4.0-5.0	.28	.28	5	7	38
	10-35	3-10	55-70	27-35	1.20-1.40	0.6-2	0.17-0.20	3.0-5.9	1.0-3.0	.32	.32			
	35-60	5-25	45-75	20-35	1.35-1.50	0.6-2	0.15-0.19	3.0-5.9	0.2-1.0	.32	.32			
7415A:														
Orion	0-21	1-15	67-89	10-18	1.20-1.30	0.6-2	0.22-0.24	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	21-27	2-86	10-88	4-18	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	1.0-3.0	.55	.55			
	27-45	2-15	55-88	10-30	1.25-1.45	0.6-2	0.18-0.22	0.0-2.9	3.0-8.0	.37	.37			
	45-60	2-86	10-88	4-18	1.20-1.40	0.6-2	0.18-0.22	0.0-2.9	0.0-0.5	.37	.37			
7451A:														
Lawson	0-14	0-15	15-90	10-27	1.20-1.55	0.6-2	0.22-0.24	0.0-2.9	3.0-7.0	.32	.32	5	5	56
	14-33	0-15	15-90	10-30	1.20-1.55	0.6-2	0.18-0.22	0.0-2.9	3.0-7.0	.32	.32			
	33-80	0-40	40-97	18-30	1.55-1.65	0.6-2	0.18-0.20	3.0-5.9	1.0-4.0	.49	.49			
7452A:														
Riley	0-8	30-52	28-50	18-27	1.20-1.40	0.6-2	0.18-0.24	3.0-5.9	3.0-4.0	.32	.32	4	6	48
	8-24	15-60	15-60	24-35	1.45-1.65	0.6-2	0.16-0.20	3.0-5.9	0.5-2.0	.28	.28			
	24-31	35-60	20-50	18-35	1.45-1.65	0.6-2	0.16-0.20	3.0-5.9	0.2-1.0	.32	.32			
	31-60	70-90	2-18	2-10	1.65-1.80	6-20	0.05-0.10	0.0-2.9	0.0-0.2	.02	.02			
8077A:														
Huntsville	0-27	0-15	58-82	18-27	1.15-1.35	0.6-2	0.22-0.24	3.0-5.9	3.0-4.0	.32	.32	5	6	48
	27-52	0-15	58-82	18-27	1.20-1.40	0.6-2	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	52-80	5-30	33-77	10-25	1.20-1.50	0.6-2	0.17-0.21	0.0-2.9	0.2-1.0	.49	.49			
8239A:														
Dorchester	0-6	10-40	50-70	11-30	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	0.5-2.0	.37	.37	5	4L	86
	6-60	10-40	30-80	18-30	1.25-1.40	0.6-2	0.22-0.24	3.0-5.9	1.0-4.0	.49	.49			

Table 19.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	In/hr	In/in	Pct	Pct					
8239B:														
Dorchester----------	0-6	10-40	50-70	11-30	1.20-1.30	0.6-2	0.20-0.22	0.0-2.9	0.5-2.0	.37	.37	5	4L	86
	6-60	10-40	30-80	18-30	1.25-1.40	0.6-2	0.22-0.24	3.0-5.9	1.0-4.0	.49	.49			

Table 20.--Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
21B:					
Pecatonica	0-3	10-22	---	5.1-7.3	0
	3-10	7.0-17	---	4.5-7.3	0
	10-18	11-16	---	4.5-7.3	0
	18-26	15-22	---	4.5-6.5	0
	26-68	15-22	---	4.5-6.5	0
	68-80	9.0-15	---	5.6-8.4	0-30
21C2:					
Pecatonica	0-7	10-22	---	5.1-6.5	0
	7-19	13-24	---	4.5-6.5	0
	19-60	15-22	---	4.5-6.5	0
21C3:					
Pecatonica	0-7	25-30	---	5.1-7.3	0
	7-55	15-22	---	4.5-6.5	0
	55-60	9.0-15	---	5.6-8.4	0-30
21D2:					
Pecatonica	0-7	10-22	---	5.1-6.5	0
	7-19	13-24	---	4.5-6.5	0
	19-60	15-22	---	4.5-6.5	0
21D3:					
Pecatonica	0-7	25-30	---	5.1-7.3	0
	7-55	15-22	---	4.5-6.5	0
	55-60	9.0-15	---	5.6-8.4	0-30
21F2:					
Pecatonica	0-5	18-25	---	5.1-7.3	0
	5-21	11-16	---	4.5-7.3	0
	21-60	15-22	---	4.5-6.5	0
29D3:					
Dubuque	0-5	15-20	---	5.1-7.3	---
	5-21	15-20	---	5.1-6.0	---
	21-26	41-45	---	5.1-6.0	---
	26-60	---	---	---	---
37A:					
Worthen	0-29	15-21	---	5.6-7.3	0
	29-64	11-14	---	5.6-7.8	0
	64-80	9.0-14	---	6.1-8.4	0-25
37B:					
Worthen	0-24	15-21	---	5.6-7.3	0
	24-56	11-14	---	5.6-7.8	0
	56-80	9.0-14	---	6.1-8.4	0-25
37C:					
Worthen	0-24	15-21	---	5.6-7.3	0
	24-56	11-14	---	5.6-7.8	0
	56-80	9.0-14	---	6.1-8.4	0-25
51A:					
Muscatune	0-16	16-32	---	6.1-7.3	0
	16-22	16-27	---	5.6-7.3	0
	22-46	17-31	---	5.6-7.3	0
	46-60	9.0-22	---	6.6-7.8	0-15

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
51B:					
Muscatune	0-14	16-32	---	5.1-7.3	0
	14-42	16-27	---	5.1-7.3	0
	42-60	10-31	---	6.6-7.8	0-15
61A:					
Atterberry	0-9	11-28	---	6.1-7.3	0
	9-17	9.0-24	---	5.6-6.5	0
	17-48	---	12-29	5.1-6.0	0
	48-60	9.0-23	---	5.6-7.3	0-8
61B:					
Atterberry	0-9	11-28	---	6.1-7.3	0
	9-13	9.0-24	---	5.6-6.5	0
	13-48	16-29	---	5.1-6.0	0
	48-60	9.0-23	---	5.6-7.3	0-8
68A:					
Sable	0-17	26-33	---	5.6-7.3	0
	17-23	20-30	---	5.6-7.3	0
	23-60	15-23	---	5.6-7.8	0
68A+:					
Sable	0-13	16-24	---	5.6-7.3	0
	13-24	20-30	---	5.6-7.3	0
	24-50	15-23	---	5.6-7.8	0
	50-60	12-18	---	6.6-8.4	0-15
81A:					
Littleton	0-9	11-28	---	5.6-7.8	0
	9-32	11-29	---	5.6-7.8	0
	32-60	11-23	---	5.6-7.8	0
81B:					
Littleton	0-9	11-28	---	5.6-7.8	0
	9-32	11-29	---	5.6-7.8	0
	32-60	11-23	---	5.6-7.8	0
86A:					
Osco	0-13	18-25	---	5.1-7.3	0
	13-38	15-23	---	5.1-6.5	0
	38-60	12-18	---	5.6-7.3	0-15
86B:					
Osco	0-14	18-25	---	5.1-7.3	0
	14-55	15-23	---	5.1-6.5	0
	55-60	12-18	---	5.6-7.3	0-15
86C:					
Osco	0-14	18-25	---	5.1-7.3	0
	14-43	15-23	---	5.1-6.5	0
	43-60	12-18	---	5.6-7.3	0
86C2:					
Osco	0-9	18-25	---	5.1-7.3	0
	9-34	15-23	---	5.1-6.5	0
	34-60	12-18	---	5.1-7.3	0-15
86C3:					
Osco	0-7	18-25	---	5.1-7.3	0
	7-30	15-23	---	5.1-6.5	0
	30-60	12-18	---	5.6-7.3	0-15

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
87A:					
Dickinson	0-8	15-20	---	5.6-7.3	0
	8-20	7.0-17	---	5.6-7.3	0
	20-31	9.0-17	---	5.1-6.5	0
	31-36	0.0-10	---	5.1-6.5	0
	36-60	0.0-10	---	5.6-6.5	0
87B:					
Dickinson	0-9	10-20	---	5.6-7.3	0
	9-17	7.0-17	---	5.6-7.3	0
	17-33	9.0-17	---	5.1-6.5	0
	33-41	0.0-10	---	5.1-6.5	0
	41-60	0.0-10	---	5.6-6.5	0
87C2:					
Dickinson	0-11	15-20	---	5.6-7.3	0
	11-29	15-20	---	5.1-6.5	0
	29-35	5.0-10	---	5.1-6.5	0
	35-60	5.0-10	---	5.6-6.5	0
88A:					
Sparta	0-17	2.0-12	---	5.1-7.3	0
	17-31	1.0-6.0	---	5.1-7.3	0
	31-72	1.0-9.0	---	5.1-6.0	0
88B:					
Sparta	0-14	2.0-12	---	5.1-7.3	0
	14-47	1.0-6.0	---	5.1-7.3	0
	47-72	1.0-9.0	---	5.1-6.0	0
88C:					
Sparta	0-8	2.0-12	---	5.1-7.3	0
	8-17	2.0-12	---	5.1-7.3	0
	17-33	1.0-6.0	---	5.1-7.3	0
	33-72	1.0-9.0	---	5.1-6.0	0
88E:					
Sparta	0-17	2.0-12	---	5.1-7.3	0
	17-32	1.0-6.0	---	5.1-7.3	0
	32-60	1.0-4.0	---	5.1-7.8	0
98A:					
Ade	0-17	6.0-15	---	5.1-6.5	0
	17-36	1.0-7.0	---	5.1-6.5	0
	36-80	1.0-9.0	---	5.1-6.0	0
98B:					
Ade	0-10	6.0-15	---	5.1-6.5	0
	10-30	1.0-7.0	---	5.1-6.5	0
	30-80	1.0-9.0	---	5.1-6.0	0
98D:					
Ade	0-17	6.0-15	---	5.1-6.5	0
	17-36	1.0-7.0	---	5.1-6.5	0
	36-80	1.0-9.0	---	5.1-6.0	0
125A:					
Selma	0-23	20-28	---	6.1-7.8	0
	23-53	11-22	---	6.1-8.4	0-20
	53-60	7.0-20	---	6.6-8.4	0-20

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
134A:					
Camden	0-7	10-20	---	5.1-7.3	0
	7-12	10-20	---	5.1-7.3	0
	12-26	13-22	---	5.1-7.3	0
	26-53	10-19	---	5.1-7.3	0
	53-60	3.0-12	---	5.1-8.4	0-5
134B:					
Camden	0-9	10-20	---	5.1-7.3	0
	9-15	10-20	---	5.1-7.3	0
	15-34	13-22	---	5.1-7.3	0
	34-40	10-19	---	5.1-7.3	0
	40-60	3.0-12	---	5.1-8.4	0-5
134C2:					
Camden	0-7	11-29	---	5.1-7.3	0
	7-34	15-29	---	5.1-7.3	0
	34-43	9.0-20	---	5.1-7.3	0
	43-80	2.0-10	---	6.1-7.8	0-25
152A:					
Drummer	0-14	26-53	---	5.6-7.3	0
	14-41	12-23	---	5.6-7.8	0
	41-47	13-21	---	6.1-8.4	0-20
	47-60	9.0-19	---	6.6-8.4	0-40
172A:					
Hoopeston	0-14	9.0-17	---	5.1-7.3	0
	14-38	7.0-13	---	5.1-7.8	0-5
	38-60	1.0-7.0	---	4.5-8.4	0-20
175B:					
Lamont	0-9	10-15	---	5.1-7.3	0
	9-29	10-15	---	5.1-7.3	0
	29-60	5.0-10	---	5.1-6.5	0
175C2:					
Lamont	0-9	10-15	---	5.1-7.3	0
	9-34	10-15	---	5.1-7.3	0
	34-60	5.0-10	---	5.1-6.5	0
175D2:					
Lamont	0-7	10-15	---	5.1-7.3	0
	7-45	10-15	---	5.1-7.3	0
	45-60	5.0-10	---	5.1-6.5	0
175D3:					
Lamont	0-4	10-15	---	5.1-7.3	0
	4-43	10-15	---	5.1-7.3	0
	43-60	5.0-10	---	5.1-6.5	0
175F2:					
Lamont	0-7	10-15	---	5.1-7.3	0
	7-45	10-15	---	5.1-7.3	0
	45-60	5.0-10	---	5.1-6.5	0
201A:					
Gilford	0-18	6.0-20	---	5.6-7.3	0
	18-32	4.0-14	---	5.6-7.3	0
	32-60	1.0-6.0	---	6.6-8.4	0-30

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
224C2:					
Strawn	0-8	13-22	---	6.1-7.3	0
	8-23	16-23	---	5.6-7.8	0
	23-60	12-19	---	7.4-8.4	5-30
224D2:					
Strawn	0-9	13-22	---	6.1-7.3	0
	9-21	16-23	---	5.6-7.8	0
	21-60	12-19	---	7.4-8.4	5-30
224D3:					
Strawn	0-8	18-25	---	5.6-7.3	0
	8-19	16-23	---	5.6-7.8	0
	19-60	12-19	---	7.4-8.4	5-30
224F2:					
Strawn	0-5	13-22	---	6.1-7.3	0
	5-18	16-23	---	5.6-7.8	0
	18-60	12-19	---	7.4-8.4	5-30
227B:					
Argyle	0-7	18-24	---	5.1-6.5	0
	7-13	10-18	---	5.1-6.5	0
	13-25	16-23	---	5.1-6.0	0
	25-70	12-22	---	5.1-6.5	0
	70-84	9.0-19	---	5.1-6.5	0
227C2:					
Argyle	0-7	18-24	---	5.1-6.5	0
	7-23	16-23	---	5.1-6.0	0
	23-58	12-22	---	5.1-6.5	0
	58-60	9.0-19	---	5.1-6.5	0
261A:					
Niota	0-9	14-22	---	5.1-7.3	0
	9-16	11-16	---	5.1-6.0	0
	16-27	21-35	21-35	3.6-6.0	0
	27-36	15-25	15-25	4.5-6.0	0
	36-49	7.0-15	---	5.6-7.3	0
	49-60	6.0-13	---	5.6-8.4	0-20
268B:					
Mt. Carroll	0-7	10-18	---	5.6-7.3	0
	7-10	10-16	---	5.6-7.3	0
	10-55	10-18	---	5.1-7.3	0
	55-60	10-15	---	5.6-8.4	0-30
268C2:					
Mt. Carroll	0-7	10-18	---	5.6-7.3	0
	7-38	10-18	---	5.1-7.3	0
	38-60	10-15	---	5.6-8.4	0-30
272A:					
Edgington	0-20	18-34	---	5.1-6.5	0
	20-31	9.0-24	---	5.1-6.0	0
	31-55	17-31	---	5.1-6.0	0
	55-60	9.0-22	---	6.1-7.8	0-15

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
274B:					
Seaton	0-9	8.0-19	---	5.6-7.3	0
	9-60	11-16	---	4.5-7.3	0
	60-80	6.0-15	---	5.6-8.4	0-35
274C:					
Seaton	0-9	8.0-19	---	5.6-7.3	0
	9-60	11-16	---	4.5-7.3	0
	60-80	6.0-15	---	5.6-8.4	0-35
274C2:					
Seaton	0-7	10-17	---	5.6-7.3	0
	7-47	11-16	---	4.5-7.3	0
	47-60	6.0-15	---	5.6-8.4	0-35
274D2:					
Seaton	0-8	10-17	---	5.6-7.3	0
	8-52	11-16	---	4.5-7.3	0
	52-60	6.0-15	---	5.6-8.4	0-35
274D3:					
Seaton	0-7	10-17	---	5.6-7.3	0
	7-52	11-16	---	4.5-7.3	0
	52-60	6.0-15	---	5.6-8.4	0-35
274E2:					
Seaton	0-8	8.0-19	---	5.6-7.3	0
	8-52	11-16	---	4.5-7.3	0
	52-60	6.0-15	---	5.6-8.4	0-35
274F:					
Seaton	0-9	8.0-19	---	5.6-7.3	0
	9-58	11-16	---	4.5-7.3	0
	58-60	6.0-15	---	5.6-8.4	0-35
275A:					
Joy	0-15	13-23	---	5.6-7.3	0
	15-51	11-28	---	5.1-7.3	0
	51-60	7.0-14	---	6.1-8.4	0-30
275B:					
Joy	0-15	13-23	---	5.6-7.3	0
	15-51	11-28	---	5.1-7.3	0
	51-60	7.0-14	---	6.1-8.4	0-30
277B:					
Port Byron	0-13	15-24	---	5.1-7.3	0-10
	13-52	11-17	---	5.6-7.3	0
	52-60	9.0-17	---	5.6-8.4	0-30
	60-77	7.0-11	---	6.1-8.4	0-30
	77-89	3.0-7.0	---	6.1-8.4	0-30
277C:					
Port Byron	0-16	15-24	---	5.1-7.3	0-10
	16-40	11-17	---	5.6-7.3	0
	40-60	9.0-17	---	5.6-8.4	0-30
277C2:					
Port Byron	0-9	15-24	---	5.1-8.4	0-10
	9-48	11-17	---	5.6-7.3	0
	48-60	9.0-17	---	5.6-8.4	0-30

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
279A:					
Rozetta	0-4	10-22	---	5.1-7.3	0
	4-11	7.0-17	---	4.5-7.3	0
	11-50	16-22	16-22	4.5-6.0	0
	50-60	12-17	---	5.6-7.8	0-15
279B:					
Rozetta	0-7	10-22	---	5.1-7.3	0
	7-11	7.0-17	---	4.5-7.3	0
	11-55	16-22	---	4.5-6.0	0
	55-60	12-17	---	5.6-7.8	0-15
280B:					
Fayette	0-9	15-20	---	5.1-7.3	0
	9-39	15-23	---	4.5-6.0	0
	39-60	15-20	---	5.1-7.8	0-15
280C:					
Fayette	0-9	15-20	---	5.1-7.3	0
	9-39	15-20	---	4.5-6.0	0
	39-60	15-20	---	5.1-7.8	0-15
280C2:					
Fayette	0-8	18-25	---	5.1-7.3	0
	8-64	15-22	---	4.5-6.0	0
	64-80	15-20	---	5.1-7.8	0-15
280C3:					
Fayette	0-8	25-30	---	5.1-7.3	0
	8-48	15-22	---	4.5-6.0	0
	48-60	15-20	---	5.1-7.8	0-15
280D2:					
Fayette	0-6	18-25	---	5.1-7.3	0
	6-48	15-22	---	4.5-6.0	0
	48-60	15-20	---	5.1-7.8	0-15
280D3:					
Fayette	0-8	25-30	---	5.1-7.3	0
	8-36	15-22	---	4.5-6.0	0
	36-60	15-20	---	5.1-7.8	0-15
280F2:					
Fayette	0-4	18-25	---	5.1-7.3	0
	4-60	15-25	---	4.5-6.0	0
	60-77	15-20	---	5.1-7.8	0-15
280G2:					
Fayette	0-3	18-25	---	5.1-7.3	0
	3-10	7.0-17	---	4.5-7.3	0
	10-45	15-20	---	4.5-6.0	0
	45-60	15-20	---	5.1-7.8	0-15
403E2:					
Elizabeth	0-6	15-26	---	6.1-8.4	0-5
	6-11	12-27	---	6.1-8.4	0-20
	11-14	12-25	---	6.1-8.4	0-40
	14-60	---	---	---	---

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
410C2:					
Woodbine	0-8	13-20	---	5.1-7.3	0
	8-18	15-20	---	4.5-6.0	0
	18-43	16-22	---	5.1-6.5	0
	43-48	27-38	---	5.6-6.5	0
	48-60	---	---	---	---
410D2:					
Woodbine	0-7	13-20	---	5.1-7.3	0
	7-24	16-23	---	5.1-6.5	0
	24-41	16-22	---	5.1-6.5	0
	41-46	27-38	---	5.6-6.5	0
	46-80	---	---	---	---
410D3:					
Woodbine	0-6	17-22	---	5.1-7.3	0
	6-17	15-20	---	4.5-6.0	0
	17-40	16-22	---	5.1-6.5	0
	40-44	27-38	---	5.6-6.5	0
	44-60	---	---	---	---
410F2:					
Woodbine	0-8	13-20	---	5.1-7.3	0
	8-18	15-20	---	4.5-6.0	0
	18-39	16-22	---	5.1-6.5	0
	39-43	27-38	---	5.6-6.5	0
	43-60	---	---	---	---
410G2:					
Woodbine	0-8	13-20	---	5.1-7.3	0
	8-19	15-20	---	4.5-6.0	0
	19-41	16-22	---	5.1-6.5	0
	41-46	27-38	---	5.6-6.5	0
	46-60	---	---	---	---
411B:					
Ashdale	0-15	18-26	---	6.1-7.3	0
	15-43	16-23	---	5.6-6.0	0
	43-51	16-23	---	5.6-7.3	0
	51-60	---	---	---	---
411C2:					
Ashdale	0-9	18-26	---	6.1-7.3	0
	9-48	16-23	---	5.6-6.0	0
	48-56	16-23	---	5.6-7.3	0
	56-60	---	---	---	---
412B:					
Ogle	0-17	18-26	---	5.1-6.5	0
	17-39	16-23	---	5.1-6.0	0
	39-60	12-18	---	5.6-6.0	0
412C2:					
Ogle	0-9	18-26	---	5.1-6.5	0
	9-41	16-23	---	5.1-6.0	0
	41-60	12-18	---	5.6-6.0	0
412C3:					
Ogle	0-5	17-22	---	5.1-6.5	0
	5-41	16-23	---	5.1-6.0	0
	41-60	12-18	---	5.6-6.0	0

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
414B:					
Myrtle	0-8	14-22	---	5.1-7.3	0
	8-14	14-22	---	5.1-7.3	---
	14-42	---	16-23	4.5-6.0	0
	42-60	12-18	---	5.6-6.0	0
414C2:					
Myrtle	0-7	14-22	---	5.1-7.3	0
	7-42	---	16-23	4.5-6.0	0
	42-60	12-18	---	5.6-6.0	0
416C2:					
Durand	0-9	18-26	---	5.1-6.5	0
	9-22	15-23	---	5.1-6.5	0
	22-60	11-21	---	5.1-6.5	0
416C3:					
Durand	0-5	17-22	---	5.1-6.5	0
	5-21	15-23	---	5.1-6.5	0
	21-60	11-21	---	5.1-6.5	0
417D3:					
Derinda	0-8	15-22	---	5.6-6.5	0
	8-17	22-26	---	5.6-7.3	0
	17-35	24-26	---	6.1-7.8	0
	35-45	20-24	---	7.4-8.4	0
417E2:					
Derinda	0-12	15-22	---	5.6-6.5	0
	12-27	22-26	---	5.6-7.3	0
	27-34	24-26	---	6.1-7.8	0
	34-60	20-24	---	7.4-8.4	0
419B:					
Flagg	0-4	14-22	---	4.5-7.3	0
	4-11	14-22	---	4.5-7.3	---
	11-48	---	16-22	4.5-6.0	0
	48-72	13-18	---	5.1-7.3	0
419C2:					
Flagg	0-7	14-22	---	4.5-7.3	0
	7-37	---	16-22	4.5-6.0	0
	37-60	13-18	---	5.1-7.3	0
419D2:					
Flagg	0-6	14-22	---	4.5-7.3	0
	6-33	---	16-22	4.5-6.0	0
	33-60	13-18	---	5.1-7.3	0
419D3:					
Flagg	0-5	---	17-21	4.5-6.0	0
	5-34	---	16-22	4.5-6.0	0
	34-60	13-18	---	5.1-7.3	0
429C2:					
Palsgrove	0-7	15-20	---	5.6-7.3	0
	7-42	16-23	---	5.1-7.3	0
	42-52	21-40	---	5.6-7.3	0
	52-60	---	---	---	---

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
505D2:					
Dunbarton	0-7	10-22	---	5.6-7.3	0
	7-14	7.0-17	---	5.6-7.8	0
	14-18	28-36	---	6.6-7.8	0
	18-60	---	---	---	---
505D3:					
Dunbarton	0-9	7.0-17	---	5.6-7.8	0
	9-16	28-36	---	6.6-7.8	0
	16-60	---	---	---	---
505E2:					
Dunbarton	0-5	10-22	---	5.6-7.3	0
	5-10	7.0-17	---	5.6-7.8	0
	10-17	28-36	---	6.6-7.8	0
	17-60	---	---	---	---
505E3:					
Dunbarton	0-9	7.0-17	---	5.6-7.8	0
	9-16	28-36	---	6.6-7.8	0
	16-60	---	---	---	---
505F2:					
Dunbarton	0-6	10-22	---	5.6-7.3	0
	6-10	7.0-17	---	5.6-7.8	0
	10-19	28-36	---	6.6-7.8	0
	19-60	---	---	---	---
505G:					
Dunbarton	0-2	10-22	---	5.6-7.3	0
	2-10	7.0-17	---	5.6-7.8	0
	10-16	28-36	---	6.6-7.8	0
	16-60	---	---	---	---
506C2:					
Hitt	0-15	19-26	---	5.1-6.5	0
	15-19	16-23	---	5.1-6.0	0
	19-37	16-21	---	5.1-6.0	0
	37-42	30-35	---	5.6-7.3	0
	42-60	---	---	---	---
506C3:					
Hitt	0-7	19-26	---	5.1-6.5	0
	7-16	16-23	---	5.1-6.0	0
	16-31	16-21	---	5.1-6.0	0
	31-41	30-35	---	5.6-7.3	0
	41-60	---	---	---	---
546C2:					
Keltner	0-11	18-24	---	5.6-7.3	0
	11-34	16-23	---	5.6-7.3	0
	34-43	13-20	---	6.6-8.4	0
	43-60	---	---	---	---
547C2:					
Eleroy	0-11	15-22	---	5.6-7.3	0
	11-46	17-23	---	5.6-7.3	0
	46-52	18-27	---	7.4-8.4	0
	52-60	---	---	---	---

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
547D2:					
Eleroy	0-6	15-22	---	5.6-7.3	0
	6-38	17-23	---	5.6-7.3	0
	38-46	18-27	---	7.4-8.4	0
	46-60	---	---	---	---
564B:					
Waukegan	0-13	13-24	---	5.6-7.3	0
	13-35	11-18	---	5.1-7.3	0
	35-60	1.0-6.0	---	4.6-7.8	0-15
564C2:					
Waukegan	0-8	13-24	---	5.6-7.3	0
	8-25	11-18	---	5.1-7.3	0
	25-60	1.0-6.0	---	4.6-7.8	0-15
565B:					
Tell	0-7	5.0-20	---	5.1-7.3	0
	7-28	4.0-25	---	5.1-6.5	0
	28-35	2.0-20	---	5.1-6.5	0
	35-60	0.0-7.0	---	5.1-6.5	0
565C2:					
Tell	0-6	5.0-20	---	5.1-7.3	0
	6-29	4.0-25	---	5.1-6.5	0
	29-33	2.0-20	---	5.1-6.5	0
	33-60	0.0-7.0	---	5.1-6.5	0
565D2:					
Tell	0-7	5.0-20	---	5.1-7.3	0
	7-22	4.0-25	---	5.1-6.5	0
	22-26	2.0-20	---	5.1-6.5	0
	26-60	0.0-7.0	---	5.1-6.5	0
565D3:					
Tell	0-6	5.0-20	---	5.1-7.3	0
	6-24	4.0-25	---	5.1-6.5	0
	24-28	2.0-20	---	5.1-6.5	0
	28-60	0.0-7.0	---	5.1-6.5	0
565F2:					
Tell	0-7	5.0-20	---	5.1-7.3	0
	7-22	4.0-25	---	5.1-6.5	0
	22-26	2.0-20	---	5.1-6.5	0
	26-60	0.0-7.0	---	5.1-6.5	0
569F2:					
Medary	0-5	7.0-30	---	5.1-6.5	0
	5-20	---	7.0-50	4.5-6.0	0
	20-60	5.0-40	---	5.1-7.8	0-15
572C2:					
Loran	0-9	20-36	---	6.1-7.3	0
	9-41	14-25	---	6.1-7.3	0
	41-60	18-27	---	6.6-8.4	0
576A:					
Zwingle	0-8	15-20	---	4.5-7.3	0
	8-11	10-18	---	5.1-6.5	0
	11-46	25-36	---	4.5-6.5	0
	41-60	10-15	---	6.1-6.5	0

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
576B:					
Zwingle	0-15	15-20	---	4.5-7.3	0
	15-50	25-36	---	4.5-6.5	0
	50-60	10-15	---	6.1-6.5	0
576C:					
Zwingle	0-13	15-20	---	4.5-7.3	0
	13-48	25-36	---	4.5-6.5	0
	48-60	10-15	---	6.1-6.5	0
660D2:					
Coatsburg	0-15	18-26	---	5.1-7.8	0
	15-52	21-29	---	5.1-6.5	0
	52-60	12-22	---	5.6-7.8	0
660D3:					
Coatsburg	0-7	20-29	---	5.1-7.8	0
	7-46	21-29	---	5.1-6.5	0
	46-60	12-22	---	5.6-7.8	0
675A:					
Greenbush	0-9	20-25	---	5.1-7.3	0
	9-16	20-25	---	5.1-7.3	0
	16-46	20-25	---	5.1-7.3	0
	46-60	20-25	---	5.6-7.3	0
675B:					
Greenbush	0-14	20-25	---	5.1-7.3	0
	14-60	25-30	---	4.5-7.3	0
	60-80	20-25	---	5.6-7.3	0
675C:					
Greenbush	0-6	20-25	---	5.1-7.3	0
	6-46	25-30	---	4.5-7.3	0
	46-60	20-25	---	5.6-7.3	0
675C2:					
Greenbush	0-6	20-25	---	5.1-7.3	0
	6-46	25-30	---	4.5-7.3	0
	46-60	20-25	---	5.6-7.3	0
689B:					
Coloma	0-10	1.0-12	---	4.5-7.3	0
	10-27	0.1-9.0	---	4.5-7.3	0
	27-60	0.4-11	---	4.5-7.3	0
689D:					
Coloma	0-12	1.0-12	---	4.5-7.3	0
	12-25	0.1-9.0	---	4.5-7.3	0
	25-60	0.4-11	---	4.5-7.3	0
689F:					
Coloma	0-12	1.0-12	---	4.5-7.3	0
	12-25	0.1-9.0	---	4.5-7.3	0
	25-60	0.4-11	---	4.5-7.3	0
735D2:					
Casco	0-6	4.0-20	---	5.6-7.3	0
	6-15	4.0-30	---	5.6-7.8	0-3
	15-60	0.0-3.0	---	7.4-8.4	1-25

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
735D2:					
Rodman	0-6	5.0-16	---	6.6-7.8	0-15
	6-10	1.0-14	---	6.6-7.8	0-25
	10-60	1.0-6.0	---	7.4-8.4	10-45
Fox	0-4	11-21	---	5.1-7.3	0
	4-7	9.0-17	---	5.1-7.3	0
	7-22	11-22	---	5.1-7.3	0
	22-39	10-22	---	5.6-7.8	0-30
	39-60	0.0-3.0	---	7.4-8.4	5-45
735E2:					
Casco	0-5	4.0-20	---	5.6-7.3	0
	5-13	4.0-30	---	5.6-7.8	0-3
	13-60	0.0-3.0	---	7.4-8.4	1-25
Rodman	0-6	5.0-16	---	6.6-7.8	0-15
	6-10	1.0-14	---	6.6-7.8	0-25
	10-60	1.0-6.0	---	7.4-8.4	10-45
Fox	0-7	11-21	---	5.1-7.3	0
	7-21	11-22	---	5.1-7.3	0
	21-37	10-22	---	5.6-7.8	0-30
	37-60	0.0-3.0	---	7.4-8.4	5-45
764B:					
Coyne	0-23	7.0-19	---	5.6-7.3	0
	23-42	3.0-13	---	5.6-7.3	0
	42-55	11-22	---	5.6-7.3	0
	55-60	0.0-6.0	---	5.6-8.4	0-10
785G:					
Lacrescent	0-12	15-27	---	6.6-7.3	0
	12-36	5.0-16	---	6.6-7.3	0
	36-60	4.0-11	---	7.4-7.8	0-5
798C2:					
Fayette	0-6	18-25	---	5.1-7.3	0
	6-48	15-22	---	4.5-6.0	0
	48-60	15-20	---	5.1-7.8	0-15
Gale	0-9	8.0-16	---	4.5-7.3	0
	9-18	10-25	---	4.5-6.0	0
	18-21	10-22	---	4.5-6.0	0
	21-27	1.0-11	---	4.5-6.0	0
	27-60	---	---	---	---
802B:					
Orthents	0-6	10-25	---	5.6-7.8	0-10
	6-60	10-20	---	5.6-7.8	0-20
835G.					
Earthen dam					
862, 864, 865.					
Pits					

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
905F:					
NewGlarus	0-5	---	---	6.1-7.3	---
	5-22	---	---	5.6-7.3	---
	22-34	---	---	5.6-7.3	---
	34-60	---	---	---	---
Lamoille	0-6	10-22	---	5.1-7.3	0
	6-10	7.0-17	---	4.5-7.3	0
	10-38	36-46	---	5.1-7.8	0
	38-60	21-27	---	5.6-7.3	0
905G:					
NewGlarus	0-5	---	---	6.1-7.3	---
	5-22	---	---	5.6-7.3	---
	22-34	---	---	5.6-7.3	---
	34-60	---	---	---	---
Lamoille	0-6	10-22	---	5.1-7.3	0
	6-10	7.0-17	---	4.5-7.3	0
	10-38	36-46	---	5.1-7.8	0
	38-60	21-27	---	5.6-7.3	0
928C2:					
NewGlarus	0-8	---	---	6.1-7.3	---
	8-24	---	---	5.6-7.3	---
	24-36	---	---	5.6-7.3	---
	36-60	---	---	---	---
Palsgrove	0-7	15-20	---	5.6-7.3	0
	7-42	16-23	---	5.1-7.3	0
	42-52	21-40	---	5.6-7.3	0
	52-60	---	---	---	---
928D2:					
NewGlarus	0-8	---	---	6.1-7.3	---
	8-24	---	---	5.6-7.3	---
	24-36	---	---	5.6-7.3	---
	36-60	---	---	---	---
Palsgrove	0-5	15-20	---	5.6-7.3	0
	5-44	16-23	---	5.1-7.3	0
	44-49	21-40	---	5.6-7.3	0
	49-60	---	---	---	---
943F2:					
Seaton	0-6	10-17	---	5.6-7.3	0
	6-49	11-16	---	4.5-7.3	0
	49-60	6.0-15	---	5.6-8.4	0-35
Timula	0-6	8.0-15	---	6.1-7.8	0-5
	6-28	8.0-15	---	6.1-7.8	0-5
	28-60	6.0-12	---	7.4-8.4	5-35
943G2:					
Seaton	0-6	8.0-19	---	5.6-7.3	0
	6-60	11-16	---	4.5-7.3	0
Timula	0-28	8.0-15	---	6.1-7.8	0-5
	28-60	6.0-12	---	7.4-8.4	5-35

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
952C2:					
Tell	0-9	5.0-20	---	5.1-7.3	0
	9-22	4.0-25	---	5.1-6.5	0
	22-26	2.0-20	---	5.1-6.5	0
	26-60	0.0-7.0	---	5.1-6.5	0
Lamont	0-9	10-15	---	5.1-7.3	0
	9-34	10-15	---	5.1-7.3	0
	34-60	5.0-10	---	5.1-6.5	0
952D2:					
Tell	0-7	5.0-20	---	5.1-7.3	0
	7-22	4.0-25	---	5.1-6.5	0
	22-26	2.0-20	---	5.1-6.5	0
	26-60	0.0-7.0	---	5.1-6.5	0
Lamont	0-7	10-15	---	5.1-7.3	0
	7-45	10-15	---	5.1-7.3	0
	45-60	5.0-10	---	5.1-6.5	0
952D3:					
Tell	0-6	5.0-20	---	5.1-7.3	0
	6-25	4.0-25	---	5.1-6.5	0
	25-28	2.0-20	---	5.1-6.5	0
	29-60	0.0-7.0	---	5.1-6.5	0
Lamont	0-4	10-15	---	5.1-7.3	0
	4-43	10-15	---	5.1-7.3	0
	43-60	5.0-10	---	5.1-6.5	0
952F2:					
Tell	0-7	5.0-20	---	5.1-7.3	0
	7-22	4.0-25	---	5.1-6.5	0
	22-26	2.0-20	---	5.1-6.5	0
	26-60	0.0-7.0	---	5.1-6.5	0
Lamont	0-7	10-15	---	5.1-7.3	0
	7-45	10-15	---	5.1-7.3	0
	45-60	5.0-10	---	5.1-6.5	0
1076A:					
Otter	0-31	16-36	---	6.1-7.8	0
	31-40	12-22	---	6.1-7.8	0
	40-64	10-21	---	6.1-8.4	0
1082A:					
Millington	0-19	20-28	---	7.4-8.4	5-20
	19-35	12-27	---	7.4-8.4	5-30
	35-60	11-25	---	7.4-8.4	10-30
1107A:					
Sawmill	0-29	24-31	---	6.1-7.8	0
	29-38	17-27	---	6.1-7.8	0
	38-60	16-25	---	6.1-7.8	0-10
1239A:					
Dorchester	0-6	15-20	---	7.4-8.4	5-30
	6-60	15-20	---	6.6-8.4	0-15

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
1451A:					
Lawson	0-14	11-28	---	6.1-7.8	0
	14-33	11-29	---	6.1-7.8	0
	33-80	11-23	---	6.1-7.8	0
3076A:					
Otter	0-43	16-36	---	6.1-7.8	0
	43-50	12-22	---	6.1-7.8	0
	50-60	10-21	---	6.1-8.4	0
3082A:					
Millington	0-19	20-28	---	7.4-8.4	5-20
	19-35	12-27	---	7.4-8.4	5-30
	35-60	11-25	---	7.4-8.4	10-30
3107+:					
Sawmill	0-11	19-26	---	6.1-7.8	0
	11-36	17-27	---	6.1-7.8	0
	36-53	16-25	---	6.1-7.8	0-10
	53-60	11-22	---	6.1-8.4	0-30
3107A:					
Sawmill	0-26	24-31	---	6.1-7.8	0
	26-54	18-29	---	6.1-7.8	0
	54-72	11-23	---	6.1-8.4	0-30
3333A:					
Wakeland	0-8	4.0-12	---	5.6-7.3	0
	8-68	4.0-12	---	5.6-7.8	0
	68-80	4.0-12	---	5.6-7.8	0
3415A:					
Orion	0-7	7.0-20	---	5.6-7.8	0
	7-22	7.0-20	---	5.6-7.8	0
	22-60	10-35	---	5.6-7.8	0
	60-80	5.0-15	---	5.6-7.8	0
3451A:					
Lawson	0-14	11-28	---	6.1-7.8	0
	14-33	11-29	---	6.1-7.8	0
	33-80	11-23	---	6.1-7.8	0
3579A:					
Beavercreek	0-4	---	---	6.1-7.8	0
	4-18	---	---	6.1-7.8	0
	18-60	---	---	6.6-8.4	0-5
3646L:					
Fluvaquents	0-9	8.0-12	---	5.6-7.3	0
	9-37	8.0-14	---	5.6-7.8	0
	37-60	6.0-12	---	5.6-7.3	0
7076A:					
Otter	0-38	16-36	---	6.1-7.8	0
	38-50	12-22	---	6.1-7.8	0
	50-60	10-21	---	6.1-8.4	0
7082A:					
Millington	0-21	24-33	---	7.4-8.4	5-30
	21-37	12-27	---	7.4-8.4	5-30
	37-60	11-25	---	7.4-8.4	10-30

Table 20.--Chemical Properties of the Soils

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate
	In	meq/100 g	meq/100 g	pH	Pct
7100A:					
Palms	0-28	150-180	---	5.1-7.8	0
	28-60	2.0-15	---	6.1-8.4	0-30
7107+:					
Sawmill	0-8	19-26	---	6.1-7.8	0
	8-14	17-27	---	6.1-7.8	0
	14-46	17-27	---	6.1-7.8	0
	46-60	16-25	---	6.1-7.8	0-10
7107A:					
Sawmill	0-10	24-31	---	6.1-7.8	0
	10-35	17-27	---	6.1-7.8	0
	35-60	12-23	---	6.1-7.8	0-10
7415A:					
Orion	0-21	7.0-20	---	5.6-7.8	0
	21-27	7.0-20	---	5.6-7.8	0
	27-45	10-35	---	5.6-7.8	0
	45-60	5.0-15	---	5.6-7.8	0
7451A:					
Lawson	0-14	11-28	---	6.1-7.8	0
	14-33	11-29	---	6.1-7.8	0
	33-80	11-23	---	6.1-7.8	0
7452A:					
Riley	0-8	20-27	---	5.6-7.8	0
	8-24	10-25	---	5.6-7.8	0
	24-31	10-25	---	5.6-7.8	0
	31-60	1.0-10	---	6.6-8.4	0-20
8077A:					
Huntsville	0-27	17-24	---	5.6-7.8	0
	27-52	11-17	---	5.6-7.8	0
	52-80	6.0-17	---	5.6-7.8	0-5
8239A:					
Dorchester	0-6	15-20	---	7.4-8.4	5-30
	6-60	15-20	---	6.6-8.4	0-15
8239B:					
Dorchester	0-6	15-20	---	7.4-8.4	5-30
	6-60	15-20	---	6.6-8.4	0-15

Table 21.--Water Features

(See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
21B:										
Pecatonica	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
21C2:										
Pecatonica	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
21C3:										
Pecatonica	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
21D2:										
Pecatonica	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
21D3:										
Pecatonica	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
21F2:										
Pecatonica	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
29D3:										
Dubuque	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
37A:										
Worthen	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
37B:										
Worthen	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
37C:										
Worthen	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
51A:										
Muscatune	B	---	---	---	---	None	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
51B:										
Muscatune	B	---	---	---	---	None	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
61A:										
Atterberry	B	---	---	---	---	None	Jan-May	0.5-2.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
61B:										
Atterberry	B	---	---	---	---	None	Jan-May	0.5-2.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
68A:										
Sable	B/D	0.0-0.5	Brief	Occasional	---	None	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
68A+:										
Sable	B/D	0.0-0.5	Brief	Occasional	---	None	Jan-May	0.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
81A:										
Littleton	B	---	---	---	---	None	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
81B:										
Littleton	B	---	---	---	---	None	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
86A:										
Osco	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
86B:										
Osco	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
86C:										
Osco	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
86C2:										
Osco	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
86C3:										
Osco	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
87A:										
Dickinson	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
87B:										
Dickinson	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
87C2:										
Dickinson	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
88A:										
Sparta	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
88B:										
Sparta	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
88C:										
Sparta	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
88E:										
Sparta	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
98A:										
Ade	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
98B:										
Ade	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
98D:										
Ade	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
125A:										
Selma	B/D	0.0-0.5	Brief	Occasional	---	None	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
134A:										
Camden	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
134B:										
Camden	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
134C2:										
Camden	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
152A:										
Drummer	B/D	0.0-0.5	Brief	Occasional	---	None	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
172A:										
Hoopeston	B	---	---	---	---	None	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
175B:										
Lamont	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
175C2:										
Lamont	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
175D2:										
Lamont	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
175D3:										
Lamont	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
175F2:										
Lamont	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
201A:										
Gilford	B/D	0.0-0.5	Brief	Occasional	---	None	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
224C2:										
Strawn	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
224D2:										
Strawn	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
224D3:										
Strawn	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
224F2:										
Strawn	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
227B:										
Argyle	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
227C2:										
Argyle	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
261A:										
Niota	C/D	0.0-0.5	Brief	Frequent	---	None	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
268B:										
Mt. Carroll	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
268C2:										
Mt. Carroll	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
272A:										
Edgington	B/D	0.0-0.5	Brief	Frequent	---	None	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
274B:										
Seaton	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
274C:										
Seaton	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
274C2:										
Seaton	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
274D2:										
Seaton	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
274D3:										
Seaton	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
274E2:										
Seaton	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
274F:										
Seaton	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
275A:										
Joy	B	---	---	---	---	None	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
275B:										
Joy	B	---	---	---	---	None	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
277B:										
Port Byron	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
277C:										
Port Byron	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
277C2:										
Port Byron	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
279A:										
Rozetta	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
279B:										
Rozetta	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
280B:										
Fayette	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
280C:										
Fayette	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
280C2:										
Fayette	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
280C3:										
Fayette	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
280D2:										
Fayette	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
280D3:										
Fayette	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
280F2:										
Fayette	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
280G2:										
Fayette	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
403E2:										
Elizabeth	D	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
410C2:										
Woodbine	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
410D2:										
Woodbine	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
410D3:										
Woodbine	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
410F2:										
Woodbine	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
410G2:										
Woodbine	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
411B:										
Ashdale	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
411C2:										
Ashdale	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
412B:										
Ogle	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
412C2:										
Ogle	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
412C3:										
Ogle	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
414B:										
Myrtle	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
414C2:										
Myrtle	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
416C2:										
Durand	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
416C3:										
Durand	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
417D3:										
Derinda	C	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	2.5-3.5	3.5-5.0	Perched
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
417E2:										
Derinda	C	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	2.5-3.5	3.5-5.0	Perched
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
419B:										
Flagg	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
419C2:										
Flagg	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
419D2:										
Flagg	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
419D3:										
Flagg	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
429C2:										
Palsgrove	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
505D2:										
Dunbarton	D	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
505D3:										
Dunbarton	D	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
505E2:										
Dunbarton	D	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
505E3:										
Dunbarton	D	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
505F2:										
Dunbarton	D	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
505G:										
Dunbarton	D	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
506C2:										
Hitt	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
506C3:										
Hitt	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
546C2:										
Keltner	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	2.0-3.0	3.5-5.5	Perched
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
547C2:										
Eleroy	C	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	2.0-3.5	3.8-5.5	Perched
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
547D2:										
Eleroy	C	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	2.0-3.5	3.8-5.5	Perched
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
564B:										
Waukegan	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
564C2:										
Waukegan	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
565B:										
Tell	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
565C2:										
Tell	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
565D2:										
Tell	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
565D3:										
Tell	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
565F2:										
Tell	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
569F2:										
Medary	C	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	2.0-3.3	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
572C2:										
Loran	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	1.0-3.0	2.0-5.5	Perched
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
576A:										
Zwingle	B/D	---	---	---	---	None	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
576B:										
Zwingle	B/D	---	---	---	---	None	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
576C:										
Zwingle	B/D	---	---	---	---	None	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
660D2:										
Coatsburg	C/D	---	---	---	---	None	Jan-May	0.0-1.0	1.0-3.0	Perched
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
660D3:										
Coatsburg	C/D	---	---	---	---	None	Jan-May	0.0-1.0	1.0-3.0	Perched
		---	---	---	---	None	Jun-Dec	>6.0	>6.0	---
675A:										
Greenbush	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
675B:										
Greenbush	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
675C:										
Greenbush	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
675C2:										
Greenbush	B	---	---	---	---	None	Jan	>6.0	>6.0	---
		---	---	---	---	None	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	None	May-Dec	>6.0	>6.0	---
689B:										
Coloma	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
689D:										
Coloma	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
689F:										
Coloma	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
735D2:										
Casco	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Rodman	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Fox	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
735E2:										
Casco	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Rodman	A	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Fox	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
764B:										
Coyne	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
785G:										
Lacrescent	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
798C2:										
Fayette	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Gale	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
802B:										
Orthents	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
835G.										
Earthen dam										
862, 864, 865.										
Pits										
905F:										
NewGlarus	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Lamoille	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
905G:										
NewGlarus	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Lamoille	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
928C2:										
NewGlarus	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Palsgrove	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
928D2:										
NewGlarus	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Palsgrove	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
943F2:										
Seaton	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Timula	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
943G2:										
Seaton	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Timula	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
952C2:										
Tell	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Lamont	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
952D2:										
Tell	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Lamont	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
952D3:										
Tell	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Lamont	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
952F2:										
Tell	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
Lamont	B	---	---	---	---	None	Jan-Dec	>6.0	>6.0	---
1076A:										
Otter	B/D	0.0-0.5	Long	Frequent	Brief	Frequent	Jan-Jun	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jul-Oct	>6.0	>6.0	---
		---	---	---	---	---	Nov-Dec	0.0-1.0	>6.0	Apparent

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
1082A:										
Millington	B/D	0.0-0.5	Long	Frequent	Brief	Frequent	Jan-Jun	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jul-Oct	>6.0	>6.0	---
		---	---	---	---	---	Nov-Dec	0.0-1.0	>6.0	Apparent
1107A:										
Sawmill	B/D	0.0-0.5	Long	Frequent	Brief	Frequent	Jan-Jun	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jul-Oct	>6.0	>6.0	---
		---	---	---	---	---	Nov-Dec	0.0-1.0	>6.0	Apparent
1239A:										
Dorchester	B	---	---	---	Brief	Frequent	Jan-Jun	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jul-Oct	>6.0	>6.0	---
		---	---	---	---	---	Nov-Dec	0.0-1.0	>6.0	Apparent
1451A:										
Lawson	B	---	---	---	Brief	Frequent	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Oct	>6.0	>6.0	---
		---	---	---	---	---	Nov-Dec	1.0-2.0	>6.0	Apparent
3076A:										
Otter	B/D	0.0-0.5	Brief	Frequent	Brief	Frequent	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
3082A:										
Millington	B/D	---	---	---	Brief	Frequent	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
3107+:										
Sawmill	B/D	---	---	---	Brief	Frequent	Jan-May	0.0-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
3107A:										
Sawmill	B/D	0.0-0.5	Brief	Frequent	Brief	Frequent	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
3333A:										
Wakeland	B	---	---	---	Brief	Frequent	Jan-May	0.5-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
3415A:										
Orion	B	---	---	---	Brief	Frequent	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
3451A:										
Lawson	B	---	---	---	Brief	Frequent	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
3579A:										
Beavercreek	B	---	---	---	Very brief	Frequent	Jan-Jun	>6.0	>6.0	---
		---	---	---	---	---	Jul-Dec	>6.0	>6.0	---
3646L:										
Fluvaquents	B	0.0-0.5	Long	Frequent	Long	Frequent	Jan-Jun	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jul-Dec	>6.0	>6.0	---
7076A:										
Otter	B/D	0.0-0.5	Brief	Frequent	Very brief	Rare	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---

Table 21.--Water Features--Continued

Map symbol and soil name	Hydrologic group	Ponding			Flooding		Months	Water table		
		Surface water depth	Duration	Frequency	Duration	Frequency		Upper limit	Lower limit	Kind of water table
		Ft						Ft	Ft	
7082A:										
Millington	B/D	0.0-0.5	Brief	Occasional	Very brief	Rare	Jan-May	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
7100A:										
Palms	A/D	0.0-1.0	Brief	Occasional	Very brief	Rare	Jan-Jun	0.0-1.0	>6.0	Apparent
		---	---	---	---	---	Jul-Oct	>6.0	>6.0	---
		---	---	---	---	---	Nov-Dec	0.0-1.0	>6.0	Apparent
7107+:										
Sawmill	B/D	---	---	None	Very brief	Rare	Jan-May	0.0-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
7107A:										
Sawmill	B/D	0.0-0.5	Brief	Occasional	Very brief	Rare	Jan-May	0.0-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
7415A:										
Orion	C	---	---	---	Very brief	Rare	Jan	1.0-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
7451A:										
Lawson	B	---	---	---	Very brief	Rare	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
7452A:										
Riley	B	---	---	---	Very brief	Rare	Jan-May	1.0-2.0	>6.0	Apparent
		---	---	---	---	---	Jun-Dec	>6.0	>6.0	---
8077A:										
Huntsville	B	---	---	---	Brief	Occasional	Jan	>6.0	>6.0	---
		---	---	---	---	---	Feb-Apr	4.0-6.0	>6.0	Apparent
		---	---	---	---	---	May-Dec	>6.0	>6.0	---
8239A:										
Dorchester	B	---	---	---	Brief	Occasional	Jan-Dec	>6.0	>6.0	---
8239B:										
Dorchester	B	---	---	---	Brief	Occasional	Jan-Dec	>6.0	>6.0	---

Table 22.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or the data were not estimated)

Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
21B:							
Pecatonica	---	---	---	---	Moderate	Moderate	Moderate
21C2:							
Pecatonica	---	---	---	---	Moderate	Moderate	Moderate
21C3:							
Pecatonica	---	---	---	---	Moderate	Moderate	Moderate
21D2:							
Pecatonica	---	---	---	---	Moderate	Moderate	Moderate
21D3:							
Pecatonica	---	---	---	---	Moderate	Moderate	Moderate
21F2:							
Pecatonica	---	---	---	---	Moderate	Moderate	Moderate
29D3:							
Dubuque	Bedrock (lithic)	20-30	---	---	High	Moderate	Moderate
37A:							
Worthen	---	---	---	---	High	Low	Low
37B:							
Worthen	---	---	---	---	High	Low	Low
37C:							
Worthen	---	---	---	---	High	Low	Low
51A:							
Muscatune	---	---	---	---	High	High	Moderate
51B:							
Muscatune	---	---	---	---	High	High	Low
61A:							
Atterberry	---	---	---	---	High	High	Moderate
61B:							
Atterberry	---	---	---	---	High	High	Moderate
68A:							
Sable	---	---	---	---	High	High	Low
68A+:							
Sable	---	---	---	---	High	High	Low
81A:							
Littleton	---	---	---	---	High	High	Low
81B:							
Littleton	---	---	---	---	High	High	Low
86A:							
Osco	---	---	---	---	High	Moderate	Moderate

Table 22.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
86B:							
Osco	---	---	---	---	High	Moderate	Moderate
86C:							
Osco	---	---	---	---	High	Moderate	Moderate
86C2:							
Osco	---	---	---	---	High	Moderate	Moderate
86C3:							
Osco	---	---	---	---	High	Moderate	Moderate
87A:							
Dickinson	---	---	---	---	Moderate	Low	Moderate
87B:							
Dickinson	---	---	---	---	Moderate	Low	Moderate
87C2:							
Dickinson	---	---	---	---	Moderate	Low	Moderate
88A:							
Sparta	---	---	---	---	Low	Low	Moderate
88B:							
Sparta	---	---	---	---	Low	Low	Moderate
88C:							
Sparta	---	---	---	---	Low	Low	Moderate
88E:							
Sparta	---	---	---	---	Low	Low	Moderate
98A:							
Ade	---	---	---	---	Low	Low	Moderate
98B:							
Ade	---	---	---	---	Low	Low	Moderate
98D:							
Ade	---	---	---	---	Low	Low	Moderate
125A:							
Selma	---	---	---	---	High	High	Low
134A:							
Camden	---	---	---	---	High	Moderate	Moderate
134B:							
Camden	---	---	---	---	High	Moderate	Low
134C2:							
Camden	---	---	---	---	High	Moderate	Moderate
152A:							
Drummer	---	---	---	---	High	High	Low
172A:							
Hoopeston	---	---	---	---	High	Moderate	Moderate
175B:							
Lamont	---	---	---	---	Moderate	Low	Moderate

Table 22.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
175C2:							
Lamont	---	---	---	---	Moderate	Low	Moderate
175D2:							
Lamont	---	---	---	---	Moderate	Low	Moderate
175D3:							
Lamont	---	---	---	---	Moderate	Low	Moderate
175F2:							
Lamont	---	---	---	---	Moderate	Low	Moderate
201A:							
Gilford	---	---	---	---	High	High	Moderate
224C2:							
Strawn	---	---	---	---	Moderate	Moderate	Low
224D2:							
Strawn	---	---	---	---	Moderate	Moderate	Low
224D3:							
Strawn	---	---	---	---	Moderate	Moderate	Low
224F2:							
Strawn	---	---	---	---	Moderate	Moderate	Low
227B:							
Argyle	---	---	---	---	Moderate	Moderate	Moderate
227C2:							
Argyle	---	---	---	---	Moderate	Moderate	Moderate
261A:							
Niota	---	---	---	---	High	High	High
268B:							
Mt. Carroll	---	---	---	---	High	Low	Moderate
268C2:							
Mt. Carroll	---	---	---	---	High	Low	Moderate
272A:							
Edgington	---	---	---	---	High	High	Moderate
274B:							
Seaton	---	---	---	---	High	Low	Moderate
274C:							
Seaton	---	---	---	---	High	Low	Moderate
274C2:							
Seaton	---	---	---	---	High	Low	Moderate
274D2:							
Seaton	---	---	---	---	High	Low	Moderate
274D3:							
Seaton	---	---	---	---	High	Low	Moderate
274E2:							
Seaton	---	---	---	---	High	Low	Moderate

Table 22.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
274F:							
Seaton	---	---	---	---	High	Low	Moderate
275A:							
Joy	---	---	---	---	High	High	Low
275B:							
Joy	---	---	---	---	High	High	Low
277B:							
Port Byron	---	---	---	---	High	Low	Low
277C:							
Port Byron	---	---	---	---	High	Low	Low
277C2:							
Port Byron	---	---	---	---	High	Low	Low
279A:							
Rozetta	---	---	---	---	High	Moderate	Moderate
279B:							
Rozetta	---	---	---	---	High	Moderate	High
280B:							
Fayette	---	---	---	---	High	Moderate	Moderate
280C:							
Fayette	---	---	---	---	High	Moderate	Moderate
280C2:							
Fayette	---	---	---	---	High	Moderate	High
280C3:							
Fayette	---	---	---	---	High	Moderate	Moderate
280D2:							
Fayette	---	---	---	---	High	Moderate	Moderate
280D3:							
Fayette	---	---	---	---	High	Moderate	Moderate
280F2:							
Fayette	---	---	---	---	High	Moderate	Moderate
280G2:							
Fayette	---	---	---	---	High	Moderate	Moderate
403E2:							
Elizabeth	Bedrock (lithic)	7-20	---	---	Moderate	Low	Low
410C2:							
Woodbine	Bedrock (lithic)	40-60	---	---	Moderate	High	Moderate
410D2:							
Woodbine	Bedrock (lithic)	40-60	---	---	Moderate	High	Low
410D3:							
Woodbine	Bedrock (lithic)	40-60	---	---	Moderate	High	Moderate
410F2:							
Woodbine	Bedrock (lithic)	40-60	---	---	Moderate	High	Moderate

Table 22.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
410G2:							
Woodbine	Bedrock (lithic)	40-60	---	---	Moderate	High	Moderate
411B:							
Ashdale	Bedrock (lithic)	40-60	---	---	High	Moderate	Moderate
411C2:							
Ashdale	Bedrock (lithic)	40-60	---	---	High	Moderate	Moderate
412B:							
Ogle	---	---	---	---	High	Moderate	Moderate
412C2:							
Ogle	---	---	---	---	High	Moderate	Moderate
412C3:							
Ogle	---	---	---	---	High	Moderate	Moderate
414B:							
Myrtle	---	---	---	---	High	Moderate	Moderate
414C2:							
Myrtle	---	---	---	---	High	Moderate	Moderate
416C2:							
Durand	---	---	---	---	Moderate	Moderate	Moderate
416C3:							
Durand	---	---	---	---	Moderate	Moderate	Moderate
417D3:							
Derinda	Bedrock (paralithic)	20-40	---	---	Moderate	High	Low
417E2:							
Derinda	Bedrock (paralithic)	20-40	---	---	Moderate	High	Low
419B:							
Flagg	---	---	---	---	High	Moderate	Moderate
419C2:							
Flagg	---	---	---	---	High	Moderate	Moderate
419D2:							
Flagg	---	---	---	---	High	Moderate	Moderate
419D3:							
Flagg	---	---	---	---	High	Moderate	Moderate
429C2:							
Palsgrove	Bedrock (lithic)	40-60	---	---	High	High	Moderate
505D2:							
Dunbarton	Bedrock (lithic)	12-20	---	---	Moderate	Moderate	Low
505D3:							
Dunbarton	Bedrock (lithic)	12-20	---	---	Moderate	Moderate	Low
505E2:							
Dunbarton	Bedrock (lithic)	12-20	---	---	Moderate	Moderate	Low

Table 22.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
505E3:							
Dunbarton	Bedrock (lithic)	12-20	---	---	Moderate	Moderate	Low
505F2:							
Dunbarton	Bedrock (lithic)	12-20	---	---	Moderate	Moderate	Low
505G:							
Dunbarton	Bedrock (lithic)	12-20	---	---	Moderate	Moderate	Low
506C2:							
Hitt	Bedrock (lithic)	40-60	---	---	Moderate	Moderate	Moderate
506C3:							
Hitt	Bedrock (lithic)	40-60	---	---	Moderate	Moderate	Moderate
546C2:							
Keltner	Bedrock (paralithic)	40-60	---	---	High	High	Low
547C2:							
Eleroy	Bedrock (paralithic)	40-60	---	---	High	High	Low
547D2:							
Eleroy	Bedrock (paralithic)	40-60	---	---	High	High	Low
564B:							
Waukegan	---	---	---	---	Low	Low	Low
564C2:							
Waukegan	---	---	---	---	Low	Low	Low
565B:							
Tell	---	---	---	---	High	High	Moderate
565C2:							
Tell	---	---	---	---	High	Moderate	Moderate
565D2:							
Tell	---	---	---	---	High	Moderate	Moderate
565D3:							
Tell	---	---	---	---	High	Moderate	Moderate
565F2:							
Tell	---	---	---	---	High	Moderate	Moderate
569F2:							
Medary	---	---	---	---	Moderate	High	Moderate
572C2:							
Loran	Bedrock (paralithic)	40-60	---	---	High	High	Low
576A:							
Zwingle	---	---	---	---	Moderate	High	Moderate
576B:							
Zwingle	---	---	---	---	Moderate	High	Moderate

Table 22.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
576C:							
Zwingle	---	---	---	---	Moderate	High	Moderate
660D2:							
Coatsburg	---	---	---	---	High	High	Moderate
660D3:							
Coatsburg	---	---	---	---	High	High	Moderate
675A:							
Greenbush	---	---	---	---	High	Moderate	Low
675B:							
Greenbush	---	---	---	---	High	Moderate	High
675C:							
Greenbush	---	---	---	---	High	Moderate	Low
675C2:							
Greenbush	---	---	---	---	High	Moderate	Low
689B:							
Coloma	---	---	---	---	Low	Low	Moderate
689D:							
Coloma	---	---	---	---	Low	Low	Moderate
689F:							
Coloma	---	---	---	---	Low	Low	Moderate
735D2:							
Casco	---	---	---	---	Low	Moderate	Low
Rodman	---	---	---	---	Low	Low	Low
Fox	---	---	---	---	Moderate	Moderate	Low
735E2:							
Casco	---	---	---	---	Low	Moderate	Low
Rodman	---	---	---	---	Low	Low	Low
Fox	---	---	---	---	Moderate	Moderate	Low
764B:							
Coyne	---	---	---	---	Moderate	Moderate	Moderate
785G:							
Lacrescent	---	---	---	---	Moderate	Low	Low
798C2:							
Fayette	---	---	---	---	High	Moderate	Moderate
Gale	Bedrock (paralithic)	20-40	---	---	High	Moderate	Moderate
802B:							
Orthents	---	---	---	---	Moderate	Moderate	Low
835G.							
Earthen dam							

Table 22.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
862, 864, 865. Pits							
905F:							
NewGlarus	Bedrock (lithic)	20-40	---	---	High	Moderate	Low
Lamoille	---	---	---	---	Moderate	Moderate	Low
905G:							
NewGlarus	Bedrock (lithic)	20-40	---	---	High	Moderate	Low
Lamoille	---	---	---	---	Moderate	Moderate	Low
928C2:							
NewGlarus	Bedrock (lithic)	20-40	---	---	High	Moderate	Low
Palsgrove	Bedrock (lithic)	40-60	---	---	High	Moderate	Low
928D2:							
NewGlarus	Bedrock (lithic)	20-40	---	---	High	Moderate	Low
Palsgrove	Bedrock (lithic)	40-60	---	---	High	Moderate	Low
943F2:							
Seaton	---	---	---	---	High	Low	Moderate
Timula	---	---	---	---	High	Low	Low
943G2:							
Seaton	---	---	---	---	High	Low	Moderate
Timula	---	---	---	---	High	Low	Low
952C2:							
Tell	---	---	---	---	High	Moderate	Moderate
Lamont	---	---	---	---	Moderate	Low	Moderate
952D2:							
Tell	---	---	---	---	High	Moderate	Moderate
Lamont	---	---	---	---	Moderate	Low	Moderate
952D3:							
Tell	---	---	---	---	High	Moderate	Moderate
Lamont	---	---	---	---	Moderate	Low	Moderate
952F2:							
Tell	---	---	---	---	High	Moderate	Moderate
Lamont	---	---	---	---	Moderate	Low	Moderate
1076A:							
Otter	---	---	---	---	High	High	Low
1082A:							
Millington	---	---	---	---	High	High	Low
1107A:							
Sawmill	---	---	---	---	High	High	Low

Table 22.--Soil Features--Continued

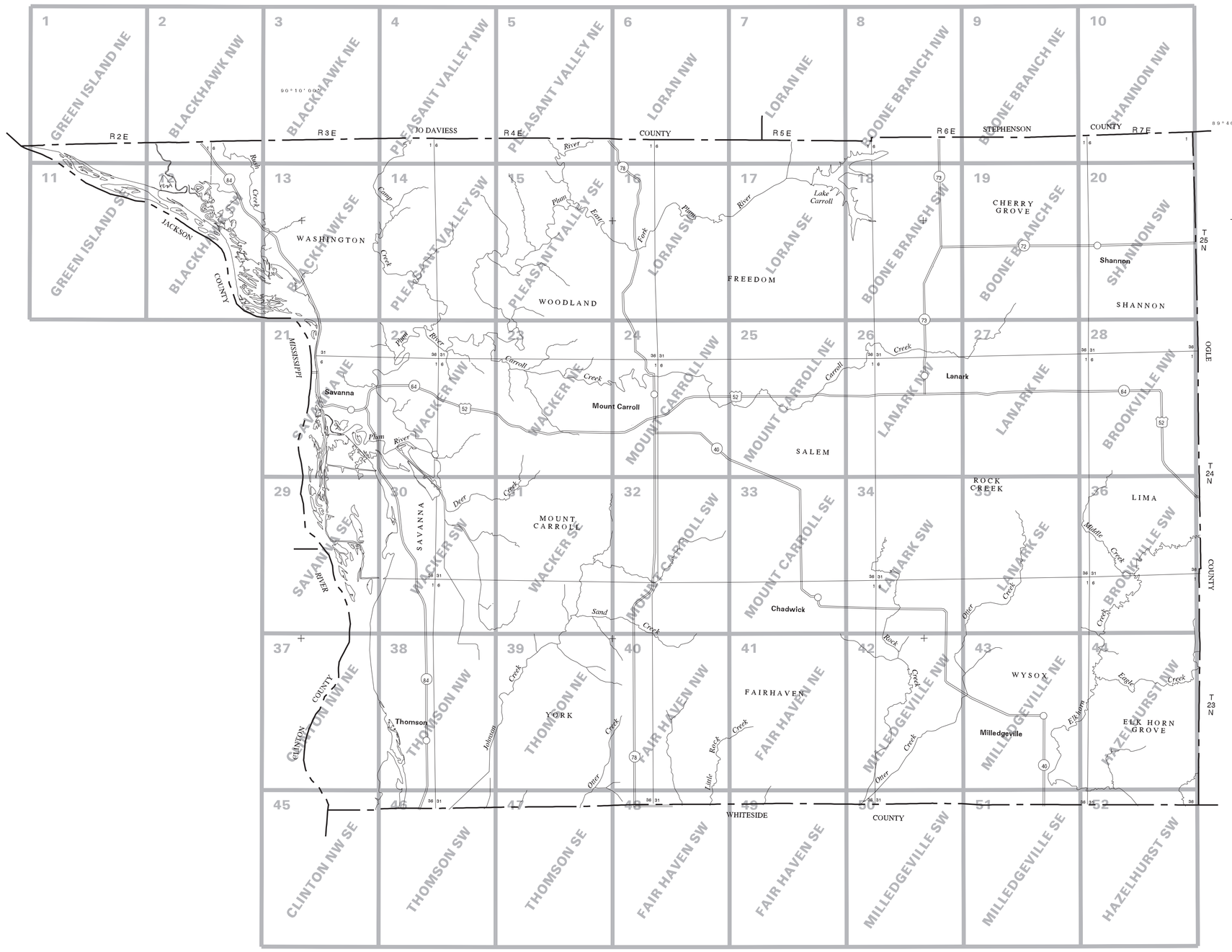
Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
1239A:							
Dorchester	---	---	---	---	High	Moderate	Low
1451A:							
Lawson	---	---	---	---	High	High	Low
3076A:							
Otter	---	---	---	---	High	High	Low
3082A:							
Millington	---	---	---	---	High	High	Low
3107+:							
Sawmill	---	---	---	---	High	High	Low
3107A:							
Sawmill	---	---	---	---	High	High	Low
3333A:							
Wakeland	---	---	---	---	High	High	Low
3415A:							
Orion	---	---	---	---	High	High	Low
3451A:							
Lawson	---	---	---	---	High	High	Low
3579A:							
Beavercreek	---	---	---	---	Low	Low	Low
3646L:							
Fluvaquents	---	---	---	---	High	Moderate	Low
7076A:							
Otter	---	---	---	---	High	High	Low
7082A:							
Millington	---	---	---	---	High	High	Low
7100A:							
Palms	---	---	2-4	25-32	High	High	Moderate
7107+:							
Sawmill	---	---	---	---	High	High	Low
7107A:							
Sawmill	---	---	---	---	High	High	Low
7415A:							
Orion	---	---	---	---	High	High	Low
7451A:							
Lawson	---	---	---	---	High	Moderate	Low
7452A:							
Riley	---	---	---	---	High	High	Low
8077A:							
Huntsville	---	---	---	---	High	Low	Low

Table 22.--Soil Features--Continued

Map symbol and soil name	Restrictive layer		Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Initial	Total		Uncoated steel	Concrete
		In	In	In			
8239A:							
Dorchester	---	---	---	---	High	Moderate	Low
8239B:							
Dorchester	---	---	---	---	High	Moderate	Low

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SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

INDEX TO MAP SHEETS

CARROLL COUNTY, ILLINOIS

1 0 1 2 3

MILES

1 0 1 2 3 4 5 6

KILOMETERS

SCALE = 1:120000

SOIL LEGEND

Map unit symbols consist of a combination of numbers and letters. The initial numbers represent the kind of soil or miscellaneous area. An uppercase letter following these numbers indicates the class of slope, except that the letter "L" indicates flooding of long duration. A final number of 2 following the slope class letter indicates that the soil is moderately eroded, and a final number of 3 indicates that the soil is severely eroded. A plus sign (+) indicates an overwash phase. Symbols that do not have a final number of 2 or 3 following a slope class letter indicate map units that are not eroded or are only slightly eroded. Symbols for miscellaneous areas do not have a slope class letter.

SYMBOL	NAME
21B	Pecatonica silt loam, 2 to 5 percent slopes
21C2	Pecatonica silt loam, 5 to 10 percent slopes, eroded
21C3	Pecatonica silty clay loam, 5 to 10 percent slopes, severely eroded
21D2	Pecatonica silt loam, 10 to 18 percent slopes, eroded
21D3	Pecatonica silty clay loam, 10 to 18 percent slopes, severely eroded
21F2	Pecatonica silt loam, 18 to 35 percent slopes, eroded
29D3	Dubuque silty clay loam, 10 to 18 percent slopes, severely eroded
37A	Worthen silt loam, 0 to 2 percent slopes
37B	Worthen silt loam, 2 to 5 percent slopes
37C	Worthen silt loam, 5 to 10 percent slopes
51A	Muscatune silt loam, 0 to 2 percent slopes
51B	Muscatune silt loam, 2 to 5 percent slopes
61A	Atterberry silt loam, 0 to 2 percent slopes
61B	Atterberry silt loam, 2 to 5 percent slopes
68A	Sable silty clay loam, 0 to 2 percent slopes
68A+	Sable silt loam, 0 to 2 percent slopes, overwash
81A	Littleton silt loam, 0 to 2 percent slopes
81B	Littleton silt loam, 2 to 5 percent slopes
86A	Osco silt loam, 0 to 2 percent slopes
86B	Osco silt loam, 2 to 5 percent slopes
86C	Osco silt loam, 5 to 10 percent slopes
86C2	Osco silt loam, 5 to 10 percent slopes, eroded
86C3	Osco silty clay loam, 5 to 10 percent slopes, severely eroded
87A	Dickinson sandy loam, 0 to 2 percent slopes
87B	Dickinson sandy loam, 2 to 5 percent slopes
87C2	Dickinson sandy loam, 5 to 10 percent slopes, eroded
88A	Sparta loamy sand, 0 to 2 percent slopes
88B	Sparta loamy sand, 1 to 6 percent slopes
88C	Sparta loamy sand, 6 to 12 percent slopes
88E	Sparta loamy sand, 12 to 20 percent slopes
98A	Ade loamy fine sand, 0 to 2 percent slopes
98B	Ade loamy fine sand, 2 to 7 percent slopes
98D	Ade loamy fine sand, 7 to 15 percent slopes
125A	Selma loam, 0 to 2 percent slopes
134A	Camden silt loam, 0 to 2 percent slopes
134B	Camden silt loam, 2 to 5 percent slopes
134C2	Camden silt loam, 5 to 10 percent slopes, eroded
152A	Drummer silty clay loam, 0 to 2 percent slopes
172A	Hoopeston sandy loam, 0 to 2 percent slopes
175B	Lamont fine sandy loam, 2 to 5 percent slopes
175C2	Lamont fine sandy loam, 5 to 10 percent slopes, eroded
175D2	Lamont fine sandy loam, 10 to 18 percent slopes, eroded
175D3	Lamont fine sandy loam, 10 to 18 percent slopes, severely eroded
175F2	Lamont fine sandy loam, 18 to 35 percent slopes, eroded
201A	Gilford fine sandy loam, 0 to 2 percent slopes
224C2	Strawn silt loam, 5 to 10 percent slopes, eroded
224D2	Strawn silt loam, 10 to 18 percent slopes, eroded
224D3	Strawn clay loam, 10 to 18 percent slopes, severely eroded
224F2	Strawn silt loam, 18 to 35 percent slopes, eroded
227B	Argyle silt loam, 2 to 5 percent slopes
227C2	Argyle silt loam, 5 to 10 percent slopes, eroded
261A	Niota silt loam, 0 to 2 percent slopes
268B	Mt. Carroll silt loam, 2 to 5 percent slopes
268C2	Mt. Carroll silt loam, 5 to 10 percent slopes, eroded
272A	Edgington silt loam, 0 to 2 percent slopes
274B	Seaton silt loam, 2 to 5 percent slopes
274C	Seaton silt loam, 5 to 10 percent slopes
274C2	Seaton silt loam, 5 to 10 percent slopes, eroded
274D2	Seaton silt loam, 10 to 18 percent slopes, eroded
274D3	Seaton silt loam, 10 to 18 percent slopes, severely eroded
274E2	Seaton silt loam, 18 to 25 percent slopes, eroded
274F	Seaton silt loam, 18 to 35 percent slopes
275A	Joy silt loam, 0 to 2 percent slopes
275B	Joy silt loam, 2 to 5 percent slopes
277B	Port Byron silt loam, 2 to 5 percent slopes
277C	Port Byron silt loam, 5 to 10 percent slopes
277C2	Port Byron silt loam, 5 to 10 percent slopes, eroded
279A	Rozetta silt loam, 0 to 2 percent slopes
279B	Rozetta silt loam, 2 to 5 percent slopes
280B	Fayette silt loam, 2 to 5 percent slopes
280C	Fayette silt loam, 5 to 10 percent slopes
280C2	Fayette silt loam, 5 to 10 percent slopes, eroded
280C3	Fayette silty clay loam, 5 to 10 percent slopes, severely eroded
280D2	Fayette silt loam, 10 to 18 percent slopes, eroded
280D3	Fayette silty clay loam, 10 to 18 percent slopes, severely eroded
280F2	Fayette silt loam, 18 to 35 percent slopes, eroded
280G2	Fayette silt loam, 35 to 60 percent slopes, eroded
403E2	Elizabeth silt loam, 12 to 35 percent slopes, eroded
410C2	Woodbine silt loam, 5 to 10 percent slopes, eroded
410D2	Woodbine silt loam, 10 to 18 percent slopes, eroded
410D3	Woodbine silty clay loam, 10 to 18 percent slopes, severely eroded
410F2	Woodbine silt loam, 18 to 35 percent slopes, eroded
410G2	Woodbine silt loam, 35 to 60 percent slopes, eroded
411B	Ashdale silt loam, 2 to 5 percent slopes
411C2	Ashdale silt loam, 5 to 10 percent slopes, eroded
412B	Ogle silt loam, 2 to 5 percent slopes
412C2	Ogle silt loam, 5 to 10 percent slopes, eroded
412C3	Ogle silty clay loam, 5 to 10 percent slopes, severely eroded
414B	Myrtle silt loam, 2 to 5 percent slopes
414C2	Myrtle silt loam, 5 to 10 percent slopes, eroded
416C2	Durand silt loam, 5 to 10 percent slopes, eroded
416C3	Durand silty clay loam, 5 to 10 percent slopes, severely eroded
417D3	Derinda silty clay loam, 10 to 18 percent slopes, severely eroded
417E2	Derinda silt loam, 18 to 25 percent slopes, eroded
419B	Flagg silt loam, 2 to 5 percent slopes
419C2	Flagg silt loam, 5 to 10 percent slopes, eroded
419D2	Flagg silt loam, 10 to 18 percent slopes, eroded
419D3	Flagg silty clay loam, 10 to 18 percent slopes, severely eroded
429C2	Palsgrove silt loam, 5 to 10 percent slopes, eroded
505D2	Dunbarton silt loam, 6 to 12 percent slopes, eroded
505D3	Dunbarton silty clay loam, 6 to 12 percent slopes, severely eroded
505E2	Dunbarton silt loam, 12 to 20 percent slopes, eroded
505E3	Dunbarton silty clay loam, 12 to 20 percent slopes, severely eroded
505F2	Dunbarton silt loam, 20 to 35 percent slopes, eroded
505G	Dunbarton silt loam, 35 to 60 percent slopes
506C2	Hitt silt loam, 5 to 10 percent slopes, eroded
506C3	Hitt silty clay loam, 5 to 10 percent slopes, severely eroded
546C2	Keltner silt loam, 5 to 10 percent slopes, eroded
547C2	Eleroy silt loam, 5 to 10 percent slopes, eroded
547D2	Eleroy silt loam, 10 to 18 percent slopes, eroded
564B	Waukegan silt loam, 2 to 5 percent slopes
564C2	Waukegan silt loam, 5 to 10 percent slopes, eroded
565B	Tell silt loam, 2 to 5 percent slopes
565C2	Tell silt loam, 5 to 10 percent slopes, eroded
565D2	Tell silt loam, 10 to 18 percent slopes, eroded
565D3	Tell silt loam, 10 to 18 percent slopes, severely eroded
565F2	Tell silt loam, 18 to 35 percent slopes, eroded
569F2	Medary silty clay loam, 15 to 45 percent slopes, eroded
572C2	Loran silt loam, 5 to 10 percent slopes, eroded
576A	Zwingle silt loam, 0 to 2 percent slopes
576B	Zwingle silt loam, 2 to 5 percent slopes
576C	Zwingle silt loam, 5 to 10 percent slopes
660D2	Coatsburg silt loam, 10 to 18 percent slopes, eroded
660D3	Coatsburg silty clay loam, 10 to 18 percent slopes, severely eroded
675A	Greenbush silt loam, 0 to 2 percent slopes
675B	Greenbush silt loam, 2 to 5 percent slopes
675C	Greenbush silt loam, 5 to 10 percent slopes
675C2	Greenbush silt loam, 5 to 10 percent slopes, eroded
689B	Coloma sand, 2 to 7 percent slopes
689D	Coloma sand, 7 to 15 percent slopes
689F	Coloma sand, 20 to 30 percent slopes
735D2	Casco-Rodman-Fox complex, 6 to 12 percent slopes, eroded
735E2	Casco-Rodman-Fox complex, 12 to 20 percent slopes, eroded
764B	Coyne fine sandy loam, 2 to 5 percent slopes
785G	Lacrescent cobbly loam, 25 to 60 percent slopes
786C2	Fayette-Gale silt loams, 5 to 10 percent slopes, eroded
802B	Orthents, loamy, undulating
835G	Earthen dam
862	Pits, sand
864	Pits, quarries
865	Pits, gravel
905F	NewGlarus-Lamoille silt loams, 18 to 35 percent slopes
905G	NewGlarus-Lamoille silt loams, 35 to 60 percent slopes
928C2	NewGlarus-Palsgrove silt loams, 5 to 10 percent slopes, eroded
928D2	NewGlarus-Palsgrove silt loams, 10 to 18 percent slopes, eroded
943F2	Seaton-Timula silt loams, 18 to 35 percent slopes, eroded
943G2	Seaton-Timula silt loams, 35 to 60 percent slopes, eroded
952C2	Tell-Lamont complex, 5 to 10 percent slopes, eroded
952D2	Tell-Lamont complex, 10 to 18 percent slopes, eroded
952D3	Tell-Lamont complex, 10 to 18 percent slopes, severely eroded
952F2	Tell-Lamont complex, 18 to 35 percent slopes, eroded
1076A	Otter silt loam, undrained, 0 to 2 percent slopes, frequently flooded
1082A	Millington silt loam, undrained, 0 to 2 percent slopes, frequently flooded
1107A	Sawmill silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded
1239A	Dorchester silt loam, undrained, 0 to 2 percent slopes, frequently flooded
1451A	Lawson silt loam, undrained, 0 to 2 percent slopes, frequently flooded
3076A	Otter silt loam, 0 to 2 percent slopes, frequently flooded
3082A	Millington silt loam, 0 to 2 percent slopes, frequently flooded
3107+	Sawmill silt loam, 0 to 2 percent slopes, frequently flooded, overwash
3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded
3333A	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded
3415A	Orion silt loam, 0 to 2 percent slopes, frequently flooded
3451A	Lawson silt loam, 0 to 2 percent slopes, frequently flooded
3579A	Beavercreek silt loam, 0 to 2 percent slopes, frequently flooded
3646L	Fluvaquents, loamy, 0 to 2 percent slopes, frequently flooded, long duration
7076A	Otter silt loam, 0 to 2 percent slopes, rarely flooded
7082A	Millington clay loam, 0 to 2 percent slopes, rarely flooded
7100A	Palms muck, 0 to 2 percent slopes, rarely flooded
7107+	Sawmill silt loam, 0 to 2 percent slopes, rarely flooded, overwash
7107A	Sawmill silty clay loam, 0 to 2 percent slopes, rarely flooded
7415A	Orion silt loam, 0 to 2 percent slopes, rarely flooded
7451A	Lawson silt loam, 0 to 2 percent slopes, rarely flooded
7452A	Riley loam, 0 to 2 percent slopes, rarely flooded
8077A	Huntsville silt loam, 0 to 2 percent slopes, occasionally flooded
8239A	Dorchester silt loam, 0 to 2 percent slopes, occasionally flooded
8239B	Dorchester silt loam, 2 to 5 percent slopes, occasionally flooded
M-W	Miscellaneous water
W	Water

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

CULTURAL FEATURES

BOUNDARIES

- National, state, or province
- County or parish
- Minor civil division
- Reservation (national forest or park, state forest or park)
- Land grant
- Limit of soil survey (label) and/or denied access area
- Field sheet matchline & neatline
- Previously Published Survey

OTHER BOUNDARY (label)

- Airport, airfield
- Cemetery
- City/county park

STATE COORDINATE TICK
1 890 000 FEET

LAND DIVISION CORNER
(section and land grants)

GEOGRAPHIC COORDINATE TICK

TRANSPORTATION

- Divided roads
- Other roads
- Trail

ROAD EMBLEM AND DESIGNATIONS

- Interstate
- Federal
- State
- County, farm or ranch

RAILROAD

POWER TRANSMISSION LINE

PIPELINE

FENCE

LEVEES

- Without road
- With road
- With railroad
- Single side slope (showing actual feature location)

DAMS

- Medium or Small

LANDFORM FEATURES

- Prominent hill or peak
- Soil Sample Site

MISCELLANEOUS CULTURAL FEATURES

- Farmstead, house
- Church
- School
- Other Religion
- Located object
- Tank
- Lookout Tower
- Oil and/or Natural Gas Wells
- Windmill
- Lighthouse

Mt Carmel
Ranger Station
Petroleum

HYDROGRAPHIC FEATURES

STREAMS

- Perennial stream, double line
- Perennial stream, single line — Label only
- Intermittent stream — Label only
- Drainage end — Label only

DRAINAGE AND IRRIGATION

- Double-line canal (label) — CANAL
- Perennial drainage and/or irrigation ditch — Label only
- Intermittent drainage and/or irrigation ditch — Label only

SMALL LAKES, PONDS AND RESERVOIRS

- Perennial water
- Miscellaneous water
- Flood pool line — FLOOD POOL LINE

MISCELLANEOUS WATER FEATURES

- Spring
- Well, artesian
- Well, irrigation

SPECIAL SYMBOLS FOR SOIL SURVEY AND SSURGO

SOIL DELINEATIONS AND SYMBOLS — 21B 86B

LANDFORM FEATURES

- Bedrock escarpment
- Other than bedrock escarpment
- Short steep slope
- Gully
- Depression, closed
- Sinkhole

PITS

- Borrow pits
- Gravel pit
- Mine or quarry
- Landfill

MISCELLANEOUS SURFACE FEATURES

- Blowout
- Clay spot
- Gravelly spot
- Lava flow
- Marsh or swamp
- Rock outcrop (includes sandstone and shale)
- Saline spot
- Sandy spot
- Severely eroded spot
- Slide or slip
- Sodic spot
- Spoil area
- Stony spot — 0
- Very stony spot
- Wet spot

AD HOC FEATURES

- Cherty spot

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
GREEN ISLAND NE QUADRANGLE (OVERSIZED)
SHEET NUMBER 1 OF 52

90°18′45″ 722 000m E 723 724 R. 2 E. 725 726 90°15′00″

42°15′00″ 4680 4679 4678 4677 4676 4675 42°11′15″

MISSISSIPPI water
JACKSON COUNTY IOWA
RIVER
IO DAVIESS COUNTY
SAVANNA ARMY DEPOT
T. 25 N.

4674 000m N 4675 000m N

722 000m E 723 724 R. 2 E. 725 726 727 90°18′45″ 90°15′00″

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

		2	2 BLACKHAWK NW
	11	12	11 GREEN ISLAND SE 12 BLACKHAWK SW

INDEX TO ADJOINING 3.75 MAPS

GREEN ISLAND NE, (OVERSIZED) ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 1 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
BLACKHAWK NW QUADRANGLE
SHEET NUMBER 2 OF 52

90°15′00″ 90°11′15″

R. 2 E. | R. 3 E.

7 27 000m E, 7 28, 7 29, 7 30, 7 31, 7 32

42°15′00″

4680, 4679, 4678, 4677, 4676, 4675

4675 000m N

T. 25 N.

JO DAVIESS COUNTY

Apple River

Clark Slough

Rush Creek

SAVANNA ARMY DEPOT

Blackhawk

42°11′15″

90°15′00″ 90°11′15″

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

1		3
11	12	13

1 GREEN ISLAND NE
3 BLACKHAWK NE
11 GREEN ISLAND SE
12 BLACKHAWK SW
13 BLACKHAWK SE

INDEX TO ADJOINING 3.75 MAPS

BLACKHAWK NW, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 2 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
BLACKHAWK NE QUADRANGLE
SHEET NUMBER 3 OF 52

90°11'15" 90°07'30"

R. 3 E.

732 000m E 733 734 735 736 737

42°15'00"

4681 4680 4679 4678 4677 4676

4675 000m N

T. 25 N.

JO DAVIESS COUNTY

42°11'15"

733 000m E 734 735 736 737

R. 3 E.

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

2		4
12	13	14

2 BLACKHAWK NW
4 PLEASANT VALLEY NW
12 BLACKHAWK SW
13 BLACKHAWK SE
14 PLEASANT VALLEY SW

INDEX TO ADJOINING 3.75 MAPS

BLACKHAWK NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 3 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
PLEASANT VALLEY NW QUADRANGLE
SHEET NUMBER 4 OF 52

90° 07′ 30″ — 90° 03′ 45″ — 42°15′00″ — 42°11′15″

R. 3 E. | R. 4 E.

738 000m E — 739 — 740 — 741 — 742

4681 — 4680 — 4679 — 4678 — 4677 — 4676 — 4675 000m N

T. 25 N.

JO DAVIESS COUNTY

Creek

Camp

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

3		5
13	14	15

INDEX TO ADJOINING 3.75 MAPS

3 BLACKHAWK NE
5 PLEASANT VALLEY NE
13 BLACKHAWK SE
14 PLEASANT VALLEY SW
15 PLEASANT VALLEY SE

PLEASANT VALLEY NW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 4 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
PLEASANT VALLEY NE QUADRANGLE
SHEET NUMBER 5 OF 52

90° 03′ 45″ — 90° 00′ 00″ — 42°15′00″ — 42°11′15″

R. 4 E.

T. 25 N.

JO DAVIESS COUNTY

Plum River

East

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1000-meter ticks: Universal Transverse Mercator, zone 15.
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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

4		6	4 PLEASANT VALLEY NW 6 LORAN NW ~~14 PLEASANT VALLEY SW~~ 15 PLEASANT VALLEY SE 16 LORAN SW
14	15	16	

INDEX TO ADJOINING 3.75 MAPS

PLEASANT VALLEY NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 5 OF 52

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UNITED STATES
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NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
LORAN NW QUADRANGLE
SHEET NUMBER 6 OF 52

90° 00′ 00″ | 89° 56′ 15″

R. 4 E. | R. 5 E.

253 000m E | 254 | 255 | 256 | 257

42° 15′ 00″ | 4681 | 4680 | 4679 | 4678 | 4677 | 4676

JO DAVIESS COUNTY

T. 25 N.

4675 000m N

42° 11′ 15″

Skunk Hollow

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

NORTH

QUARTER QUADRANGLE LOCATION

5		7
15	16	17

INDEX TO ADJOINING 3.75 MAPS

5 PLEASANT VALLEY NE
7 LORAN NE
15 PLEASANT VALLEY SE
16 LORAN SW
17 LORAN SE

LORAN NW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 6 OF 52

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UNITED STATES
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NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
LORAN NE QUADRANGLE
SHEET NUMBER 7 OF 52

89°56'15" 89°52'30"

R. 5 E.

258 000m E 259 260 261 262

42°15'00" 42°11'15"

4681 4680 4679 4678 4677 4676

4675 000m N

T. 25 N.

JO DAVIESS COUNTY STEPHENSON COUNTY

Plum River

East Lake Carroll



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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

6		8	6 LORAN NW 8 BOONE BRANCH NW 16 LORAN SW 17 LORAN SE 18 BOONE BRANCH SW
16	17	18	

INDEX TO ADJOINING 3.75 MAPS

LORAN NE, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 7 OF 52

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UNITED STATES
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NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
BOONE BRANCH NW QUADRANGLE
SHEET NUMBER 8 OF 52



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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

7		9	7 LORAN NE 9 BOONE BRANCH NE
17	18	19	17 LORAN SE 18 BOONE BRANCH SW 19 BOONE BRANCH SE

INDEX TO ADJOINING 3.75 MAPS

BOONE BRANCH NW, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 8 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
BOONE BRANCH NE QUADRANGLE
SHEET NUMBER 9 OF 52

89°48'45" 89°45'00"
42°15'00"
42°11'15"
R. 6 E.
T. 25 N.
STEPHENSON COUNTY
Creek
Lost

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

8		10
18	19	20

8 BOONE BRANCH NW
10 SHANNON NW
18 BOONE BRANCH SW
19 BOONE BRANCH SE
20 SHANNON SW

INDEX TO ADJOINING 3.75 MAPS

BOONE BRANCH NE, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 9 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
SHANNON NW QUADRANGLE
SHEET NUMBER 10 OF 52

89° 45′ 00″ R. 6 E. | R. 7 E. — 89° 41′ 15″



89° 45′ 00″ R. 6 E. | R. 7 E. — 89° 41′ 15″

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

9		
19	20	

9 BOONE BRANCH NE
19 BOONE BRANCH SE
20 SHANNON SW

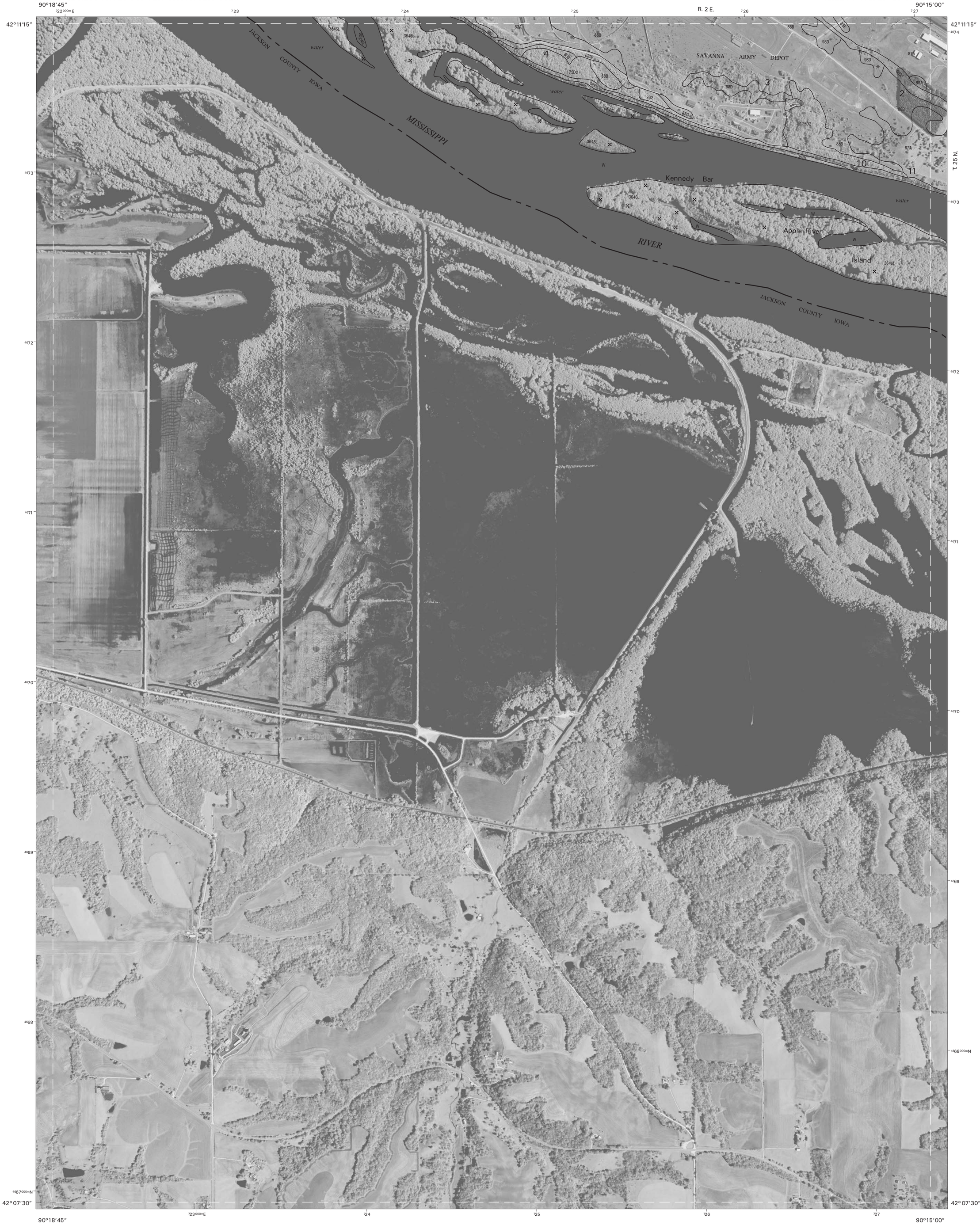
INDEX TO ADJOINING 3.75 MAPS

SHANNON NW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 10 OF 52

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UNITED STATES
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CARROLL COUNTY, ILLINOIS
GREEN ISLAND SE QUADRANGLE
SHEET NUMBER 11 OF 52



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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

	1	2
		12

1 GREEN ISLAND NE
2 BLACKHAWK NW
12 BLACKHAWK SW
INDEX TO ADJOINING 3.75 MAPS

GREEN ISLAND SE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 11 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
BLACKHAWK SW QUADRANGLE
SHEET NUMBER 12 OF 52

90°15′00″ 90°11′15″ 42°11′15″ 42°07′30″

R. 2 E. | R. 3 E.

T. 25 N.

728 729 730 731 732

728000mE

4674 4673 4672 4671 4670 4669 4668000mN

SAVANNA ARMY DEPOT
APPLE
RIVER
Blackhawk
Lundy Lake
Horseshoe Lake
Apple River
Island
Arnold
Creek
Road
Island 259
Marcus
Buffalo Lake
Hickory Slough
MISSISSIPPI RIVER
JACKSON COUNTY IOWA
water

1 2 5 6 7 8 11 12 13 17 18 19 20 29 30

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

1	2	3	1 GREEN ISLAND NE 2 BLACKHAWK NW 3 BLACKHAWK NE
11		13	11 GREEN ISLAND SE 13 BLACKHAWK SE
		21	21 SAVANNA NE

INDEX TO ADJOINING 3.75 MAPS

BLACKHAWK SW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 12 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
BLACKHAWK SE QUADRANGLE
SHEET NUMBER 13 OF 52

90°11'15" 90°07'30"

R. 3 E.

733 000m E 734 735 736 737

42°11'15"

4674 4673 4672 4671 4670 4669 4668 000m N

T. 25 N.

42°07'30"

Creek
Camp
Buffalo
Lake
water
Santa Fe Beach
MISSISSIPPI
RIVER
JACKSON COUNTY, IOWA
Island 266

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

2	3	4	2 BLACKHAWK NW 3 BLACKHAWK NE 4 PLEASANT VALLEY NW
12		14	12 BLACKHAWK SW 14 PLEASANT VALLEY SW
	21	22	21 SAVANNA NE 22 WACKER NW

INDEX TO ADJOINING 3.75 MAPS

BLACKHAWK SE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 13 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
PLEASANT VALLEY SW QUADRANGLE
SHEET NUMBER 14 OF 52

90°07′30″ 90°03′45″

738000mE 739 740 741 742

R. 3 E. | R. 4 E.

42°11′15″

4674 4673 4672 4671 4670 4669 4668000mN

T. 25 N.

42°07′30″

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

3	4	5
13		15
21	22	23

3 BLACKHAWK NE
4 PLEASANT VALLEY NW
5 PLEASANT VALLEY NE
13 BLACKHAWK SE
15 PLEASANT VALLEY SE
21 SAVANNA NE
22 WACKER NW
23 WACKER NE

INDEX TO ADJOINING 3.75 MAPS

PLEASANT VALLEY SW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 14 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
PLEASANT VALLEY SE QUADRANGLE
SHEET NUMBER 15 OF 52

90° 03′ 45″ — 90° 00′ 00″ — 42° 11′ 15″ — 42° 07′ 30″

743 000m E — 744 — 745 — R. 4 E. — 746 — 747 — 748

4674 — 4673 — 4672 — 4671 — 4670 — 4669 — 4668 000m N

T. 25 N.

Plum River — East Plum River — Polsgrove

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

NORTH

QUARTER QUADRANGLE LOCATION

4	5	6	4 PLEASANT VALLEY NW 5 PLEASANT VALLEY NE 6 LORAN NW
14		16	14 PLEASANT VALLEY SW 16 LORAN SW
22	23	24	22 WACKER NW 23 WACKER NE 24 MOUNT CARROLL NW

INDEX TO ADJOINING 3.75 MAPS

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PLEASANT VALLEY SE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 15 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
LORAN SW QUADRANGLE
SHEET NUMBER 16 OF 52

90° 00′ 00″ — 89° 56′ 15″ — 42° 11′ 15″ — 42° 07′ 30″

253 000m E — 255 — 256 — 257

R. 4 E. | R. 5 E.

T. 25 N.

4674 — 4673 — 4672 — 4671 — 4670 — 4669 — 4668 000m N

Skunk Hollow — East Plum River — West Plum River

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

NORTH

QUARTER QUADRANGLE LOCATION

5	6	7	5 PLEASANT VALLEY NE 6 LORAN NW 7 LORAN NE
15		17	15 PLEASANT VALLEY SE 17 LORAN SE
23	24	25	~~23 WACKER NE~~ 24 MOUNT CARROLL NW 25 MOUNT CARROLL NE

INDEX TO ADJOINING 3.75 MAPS

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LORAN SW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 16 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
LORAN SE QUADRANGLE
SHEET NUMBER 17 OF 52

89°56'15" 89°52'30"

R. 5 E.

42°11'15" 42°07'30"

T 25 N.



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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

6	7	8	6 LORAN NW 7 LORAN NE 8 BOONE BRANCH NW
16		18	16 LORAN SW 18 BOONE BRANCH SW
24	25	26	24 MOUNT CARROLL NW 25 MOUNT CARROLL NE 26 LANARK NW

INDEX TO ADJOINING 3.75 MAPS

LORAN SE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 17 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
BOONE BRANCH SW QUADRANGLE
SHEET NUMBER 18 OF 52

89°52′30″ — 89°48′45″ — 42°11′15″ — 42°07′30″

R. 5 E. | R. 6 E.

T. 25 N.

263000m E — 264 — 265 — 266 — 267

4674 — 4673 — 4672 — 4671 — 4670 — 4669 — 4668000m N

Lake Carroll — Dyslin Valley — Zeir Cors — Georgetown — Fork Creek — East

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

7	8	9
17		19
25	26	27

7 LORAN NE
8 BOONE BRANCH NW
9 BOONE BRANCH NE
17 LORAN SE
19 BOONE BRANCH SE
25 MOUNT CARROLL NE
26 LANARK NW
27 LANARK NE

INDEX TO ADJOINING 3.75 MAPS

BOONE BRANCH SW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 18 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
BOONE BRANCH SE QUADRANGLE
SHEET NUMBER 19 OF 52

89°48′45″ — 89°45′00″ — 42°11′15″ — 42°07′30″

R. 6 E.

T. 25 N.

Kittredge

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

MILES: 0.5 0 0.5

FEET: 500 0 500 1000 1500 2000 2500 3000 3500

KILOMETERS: 0.5 0 0.5

8	9	10	8 BOONE BRANCH NW 9 BOONE BRANCH NE 10 SHANNON NW
18		20	18 BOONE BRANCH SW 20 SHANNON SW
26	27	28	26 LANARK NW 27 LANARK NE 28 BROOKVILLE NW

INDEX TO ADJOINING 3.75 MAPS

BOONE BRANCH SE, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 19 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
SHANNON SW QUADRANGLE (OVERSIZED)
SHEET NUMBER 20 OF 52

89°45′00″ R. 6 E. | R. 7 E. 89°41′15″

42°11′15″ 42°07′30″

T. 25 N.

OGLE COUNTY

Shannon

Creek

Lost

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

NORTH

QUARTER QUADRANGLE LOCATION

INDEX TO ADJOINING 3.75 MAPS

9 BOONE BRANCH NE
10 SHANNON NW
19 BOONE BRANCH SE
27 LANARK NE
28 BROOKVILLE NW

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 16. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

SHANNON SW, (OVERSIZED) ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 20 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
SAVANNA NE QUADRANGLE
SHEET NUMBER 21 OF 52

90°11'15" 90°07'30"

R. 3 E.

42°07'30" 42°03'45"

T. 24 N. | T. 25 N.

MISSISSIPPI RIVER
JACKSON COUNTY IOWA
Island 266
Sweeney Islands
Savanna Bay
SAVANNA
Plum River
Bowens Lake
Misquakee Lake
Edick Lake
Savanna Slough
SPRING LAKE
water

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

12	13	14	12 BLACKHAWK SW 13 BLACKHAWK SE 14 PLEASANT VALLEY SW
		22	22 WACKER NW
	29	30	29 SAVANNA SE 30 WACKER SW

INDEX TO ADJOINING 3.75 MAPS

SAVANNA NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 21 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
WACKER NW QUADRANGLE
SHEET NUMBER 22 OF 52

90° 07′ 30″ — 90° 03′ 45″

738 000m E — 739 — 740 — 741 — 742 — 743

R. 3 E. | R. 4 E.

42° 07′ 30″ — 42° 03′ 45″

4667 — 4666 — 4665 — 4664 — 4663 — 4662 — 4661 000m N

T. 24 N. | T. 25 N.

SAVANNA

Plum River — Camp Creek — River

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

13	14	15
21		23
29	30	31

13 BLACKHAWK SE
14 PLEASANT VALLEY SW
15 PLEASANT VALLEY SE
21 SAVANNA NE
23 WACKER NE
29 SAVANNA SE
30 WACKER SW
31 WACKER SE

INDEX TO ADJOINING 3.75 MAPS

WACKER NW, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 22 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
WACKER NE QUADRANGLE
SHEET NUMBER 23 OF 52

90° 03′ 45″ — 90° 00′ 00″ — 42° 07′ 30″ — 42° 03′ 45″

743 000m E — 744 — 745 — R. 4 E. — 746 — 747

T. 25 N. | T. 24 N.

4667 — 4665 — 4664 — 4663 — 4662 — 4661 000mN

Plum River — Carroll Creek — Cedar Creek — Deer Creek — Center Hill

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

NORTH

QUARTER QUADRANGLE LOCATION

14	15	16
22		24
30	31	32

14 PLEASANT VALLEY SW
15 PLEASANT VALLEY SE
16 LORAN SW
22 WACKER NW
24 MOUNT CARROLL NW
30 WACKER SW
31 WACKER SE
32 MOUNT CARROLL SW

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WACKER NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 23 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
MOUNT CARROLL NW QUADRANGLE
SHEET NUMBER 24 OF 52

90° 00′ 00″ — 89° 56′ 15″ — 42° 07′ 30″ — 42° 03′ 45″

R. 4 E. | R. 5 E.

T. 24 N. | T. 25 N.



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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 16. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

15	16	17	15 PLEASANT VALLEY SE 16 LORAN SW 17 LORAN SE
23		25	23 WACKER NE 25 MOUNT CARROLL NE 31 WACKER SE
31	32	33	32 MOUNT CARROLL SW 33 MOUNT CARROLL SE

INDEX TO ADJOINING 3.75 MAPS

MOUNT CARROLL NW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 24 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
MOUNT CARROLL NE QUADRANGLE
SHEET NUMBER 25 OF 52

89°56'15" 89°52'30" 42°07'30" 42°03'45"

R. 5 E.

T. 25 N. | T. 24 N.

Johnson Creek · Straddle Creek · Carroll Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 16. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

16	17	18	16 LORAN SW 17 LORAN SE 18 BOONE BRANCH SW
24		26	24 MOUNT CARROLL NW 26 LANARK NW
32	33	34	32 MOUNT CARROLL SW 33 MOUNT CARROLL SE 34 LANARK SW

INDEX TO ADJOINING 3.75 MAPS

MOUNT CARROLL NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 25 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
LANARK NW QUADRANGLE
SHEET NUMBER 26 OF 52

89°52′30″ 89°48′45″ 42°07′30″ 42°03′45″

R. 5 E. | R. 6 E.

T. 24 N. | T. 25 N.

263 000m E 264 265 266 267

4662 4663 4664 4665 4666 4667 4661 000m N

LANARK

Straddle Creek

Rock Creek

M-W W

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

17	18	19	17 LORAN SE 18 BOONE BRANCH SW 19 BOONE BRANCH SE
25		27	25 MOUNT CARROLL NE 27 LANARK NE
33	34	35	33 MOUNT CARROLL SE 34 LANARK SW 35 LANARK SE

INDEX TO ADJOINING 3.75 MAPS

LANARK NW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 26 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
LANARK NE QUADRANGLE
SHEET NUMBER 27 OF 52

89° 48′ 45″ — 89° 45′ 00″ — 42° 07′ 30″ — 42° 03′ 45″

R. 6 E.

368 000m E — 269 — 270 — 271 — 272

4667 — 4666 — 4665 — 4664 — 4663 — 4662 — 4661 000m N

T. 25 N. | T. 24 N.



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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

18	19	20
26		28
34	35	36

18 BOONE BRANCH SW
19 BOONE BRANCH SE
20 SHANNON SW
26 LANARK NW
28 BROOKVILLE NW
34 LANARK SW
35 LANARK SE
36 BROOKVILLE SW

INDEX TO ADJOINING 3.75 MAPS

LANARK NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 27 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
BROOKVILLE NW QUADRANGLE (OVERSIZED)
SHEET NUMBER 28 OF 52

89° 45′ 00″ — R. 6 E. | R. 7 E. — 89° 41′ 15″

42° 07′ 30″ — 42° 03′ 45″

T. 25 N. | T. 24 N.

OGLE COUNTY

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 16. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

19	20		19 BOONE BRANCH SE 20 SHANNON SW
27			27 LANARK NE
35	36		35 LANARK SE 36 BROOKVILLE SW

INDEX TO ADJOINING 3.75 MAPS

BROOKVILLE NW, (OVERSIZED) ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 28 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
SAVANNA SE QUADRANGLE
SHEET NUMBER 29 OF 52

90°11'15" 90°07'30"

R. 3 E.

42°03'45" 42°00'00"

4660 4659 4658 4657 4656 4655 4654000mN

733000mE 734 735 736 737 738

JACKSON COUNTY IOWA
CLINTON COUNTY IOWA
MISSISSIPPI RIVER
SPRING LAKE
Savanna Islands
Dixie Islands
Mound Island

21 23 27 34 35 3 2 11

3646L 3076A 764B 88B 88A 869F 87A

T. 23 N. | T. 24 N.

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

	21	22	21 SAVANNA NE 22 WACKER NW
		30	30 WACKER SW
	37	38	37 CLINTON NW NE 38 THOMSON NW

INDEX TO ADJOINING 3.75 MAPS

SAVANNA SE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 29 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
WACKER SW QUADRANGLE
SHEET NUMBER 30 OF 52

90° 07′ 30″ — 90° 03′ 45″ — 42° 03′ 45″ — 42° 00′ 00″

738 000m E — 739 — 740 — 741 — 742 — 743

R. 3 E. | R. 4 E.

T. 24 N. | T. 23 N.

4660 — 4659 — 4658 — 4657 — 4656 — 4655 — 4654 000m N

SPRING LAKE

Deer Creek

SAVANNA - YORK DITCH

23 24 19 20 26 25 30 29 35 36 31 32 2 1 6 5 11 12 7 8

84

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

21	22	23
29		31
37	38	39

21 SAVANNA NE
22 WACKER NW
23 WACKER NE
29 SAVANNA SE
31 WACKER SE
37 CLINTON NW NE
38 THOMSON NW
39 THOMSON NE

INDEX TO ADJOINING 3.75 MAPS

WACKER SW, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 30 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
WACKER SE QUADRANGLE
SHEET NUMBER 31 OF 52

90° 03′ 45″ — 90° 00′ 00″ — 42° 03′ 45″ — 42° 00′ 00″

R. 4 E.

7 44 000mE — 7 45 — 7 46 — 7 47 — 7 48

4660 — 4659 — 4658 — 4657 — 4656 — 4655 — 4654 000mN

T. 24 N. | T. 23 N.

Wacker — Deer — Creek — Johnson — East — Sand — Argo Fay

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

22	23	24
30		32
38	39	40

22 WACKER NW
23 WACKER NE
24 MOUNT CARROLL NW
30 WACKER SW
32 MOUNT CARROLL SW
~~38 THOMSON NW~~
39 THOMSON NE
40 FAIR HAVEN NW

INDEX TO ADJOINING 3.75 MAPS

WACKER SE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 31 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
MOUNT CARROLL SW QUADRANGLE
SHEET NUMBER 32 OF 52

90° 00′ 00″ — 89° 56′ 15″ — 42° 03′ 45″ — 42° 00′ 00″

R. 4 E. | R. 5 E.

T. 24 N. | T. 23 N.

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 16. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

23	24	25	23 WACKER NE 24 MOUNT CARROLL NW 25 MOUNT CARROLL NE
31		33	31 WACKER SE 33 MOUNT CARROLL SE
39	40	41	~~39 THOMSON NE~~ 40 FAIR HAVEN NW 41 FAIR HAVEN NE

INDEX TO ADJOINING 3.75 MAPS

MOUNT CARROLL SW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 32 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
MOUNT CARROLL SE QUADRANGLE
SHEET NUMBER 33 OF 52

89°56'15" — 89°52'30" — 42°03'45" — 42°00'00"

R. 5 E.

T. 24 N. | T. 23 N.

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 16. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

24	25	26
32		34
40	41	42

24 MOUNT CARROLL NW
25 MOUNT CARROLL NE
26 LANARK NW
32 MOUNT CARROLL SW
34 LANARK SW
40 FAIR HAVEN NW
41 FAIR HAVEN NE
42 MILLEDGEVILLE NW

INDEX TO ADJOINING 3.75 MAPS

MOUNT CARROLL SE, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 33 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
LANARK SW QUADRANGLE
SHEET NUMBER 34 OF 52

89°52′30″ — 89°48′45″ — 42°03′45″ — 42°00′00″

263000m E — 264 — 265 — 266 — 267

R. 5 E. | R. 6 E.

4660 — 4659 — 4658 — 4657 — 4656 — 4655 — 4654000m N

T. 24 N. | T. 23 N.

Rock Creek

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

25	26	27	25 MOUNT CARROLL NE 26 LANARK NW 27 LANARK NE
33		35	33 MOUNT CARROLL SE 35 LANARK SE
41	42	43	41 FAIR HAVEN NE 42 MILLEDGEVILLE NW 43 MILLEDGEVILLE NE

INDEX TO ADJOINING 3.75 MAPS

LANARK SW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 34 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
LANARK SE QUADRANGLE
SHEET NUMBER 35 OF 52



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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 16. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

26	27	28
34		36
42	43	44

26 LANARK NW
27 LANARK NE
28 BROOKVILLE NW
34 LANARK SW
36 BROOKVILLE SW
42 MILLEDGEVILLE NW
43 MILLEDGEVILLE NE
44 HAZELHURST NW

INDEX TO ADJOINING 3.75 MAPS

LANARK SE, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 35 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
BROOKVILLE SW QUADRANGLE (OVERSIZED)
SHEET NUMBER 36 OF 52

89° 45′ 00″ — R. 6 E. | R. 7 E. — 89° 41′ 15″

42° 03′ 45″ — 42° 00′ 00″

T. 23 N. | T. 24 N.

OGLE COUNTY

Creek — Middle — Elkhorn — Elkhorn Grove



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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

27	28		27 LANARK NE 28 BROOKVILLE NW
35			35 LANARK SE
43	44		43 MILLEDGEVILLE NE 44 HAZELHURST NW

INDEX TO ADJOINING 3.75 MAPS

BROOKVILLE SW, (OVERSIZED) ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 36 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
CLINTON NW NE QUADRANGLE
SHEET NUMBER 37 OF 52

90°11'15" 733000m E 734 735 736 737 R. 3 E. 738 90°07'30"

42°00'00" 4653 4652 4651 4650 T. 23 N. 4649 4648 4647000m N 41°56'15"

CLINTON COUNTY IOWA

MISSISSIPPI RIVER

Woodruffs Island

11 10 15 14 26 35

88A 88B 88C 689F 3646L 92A 1452A 1452B 1758 7452A

W

90°11'15" 734000m E 735 736 737 R. 3 E. 738 90°07'30"

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

	29	30	29 SAVANNA SE 30 WACKER SW
		38	38 THOMSON NW
	45	46	45 CLINTON NW SE 46 THOMSON SW

INDEX TO ADJOINING 3.75 MAPS

CLINTON NW NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 37 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
THOMSON NW QUADRANGLE
SHEET NUMBER 38 OF 52

90° 07′ 30″ — 90° 03′ 45″ — 42° 00′ 00″ — 41° 56′ 15″

R. 3 E. | R. 4 E.

739 000m E — 740 — 741 — 742 — 743

4653 — 4652 — 4651 — 4650 — 4649 — 4648 — 4647 000m N

T. 23 N.

Thomson

MISSISSIPPI RIVER

Potters Marsh

POTTERS SLOUGH

Johnson Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

29	30	31
37		39
45	46	47

29 SAVANNA SE
30 WACKER SW
31 WACKER SE
37 CLINTON NW NE
39 THOMSON NE
45 CLINTON NW SE
46 THOMSON SW
47 THOMSON SE

INDEX TO ADJOINING 3.75 MAPS

THOMSON NW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 38 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
THOMSON NE QUADRANGLE
SHEET NUMBER 39 OF 52

90° 03′ 45″ — 90° 00′ 00″ — 42° 00′ 00″ — 41° 56′ 15″

744 000m E — 745 — 746 — 747 — 748

R. 4 E.

T. 23 N.

4653 — 4652 — 4651 — 4650 — 4649 — 4648 — 4647 000m N

Johnson Creek — Otter Creek

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

30	31	32	30 WACKER SW 31 WACKER SE 32 MOUNT CARROLL SW
38		40	38 THOMSON NW 40 FAIR HAVEN NW
46	47	48	46 THOMSON SW 47 THOMSON SE 48 FAIR HAVEN SW

INDEX TO ADJOINING 3.75 MAPS

THOMSON NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 39 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
FAIR HAVEN NW QUADRANGLE
SHEET NUMBER 40 OF 52

90° 00′ 00″ — 89° 56′ 15″ — 42° 00′ 00″ — 41° 56′ 15″

R. 4 E. | R. 5 E.

T. 23 N.

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

31	32	33
39		41
47	48	49

INDEX TO ADJOINING 3.75 MAPS

31 WACKER SE
32 MOUNT CARROLL SW
33 MOUNT CARROLL SE
39 THOMSON NE
41 FAIR HAVEN NE
47 THOMSON SE
48 FAIR HAVEN SW
49 FAIR HAVEN SE

FAIR HAVEN NW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 40 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
FAIR HAVEN NE QUADRANGLE
SHEET NUMBER 41 OF 52

89°56'15" 89°52'30"

R. 5 E.

T. 23 N.

257 000m E 258 259 260 261

42°00'00" 41°56'15"

4653 4652 4651 4650 4649 4648 4647 000m N

Fair Haven

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 16. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

32	33	34	32 MOUNT CARROLL SW 33 MOUNT CARROLL SE 34 LANARK SW
40		42	40 FAIR HAVEN NW 42 MILLEDGEVILLE NW
48	49	50	48 FAIR HAVEN SW 49 FAIR HAVEN SE 50 MILLEDGEVILLE SW

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FAIR HAVEN NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 41 OF 52

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DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
MILLEDGEVILLE NW QUADRANGLE
SHEET NUMBER 42 OF 52

89°52′30″ — R. 5 E. | R. 6 E. — 89°48′45″

42°00′00″ — 41°56′15″

T. 23 N.



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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

33	34	35	33 MOUNT CARROLL SE 34 LANARK SW 35 LANARK SE
41		43	41 FAIR HAVEN NE 43 MILLEDGEVILLE NE
49	50	51	49 FAIR HAVEN SE 50 MILLEDGEVILLE SW 51 MILLEDGEVILLE SE

INDEX TO ADJOINING 3.75 MAPS

MILLEDGEVILLE NW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 42 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
MILLEDGEVILLE NE QUADRANGLE
SHEET NUMBER 43 OF 52

89° 48′ 45″ — 89° 45′ 00″ — 42° 00′ 00″ — 41° 56′ 15″

R. 6 E.

T. 23 N.

MILLEDGEVILLE

Otter Creek — Elkhorn Creek

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

NORTH

QUARTER QUADRANGLE LOCATION

34	35	36	34 LANARK SW 35 LANARK SE 36 BROOKVILLE SW
42		44	42 MILLEDGEVILLE NW 44 HAZELHURST NW
50	51	52	50 MILLEDGEVILLE SW 51 MILLEDGEVILLE SE 52 HAZELHURST SW

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MILLEDGEVILLE NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 43 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
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CARROLL COUNTY, ILLINOIS
HAZELHURST NW QUADRANGLE (OVERSIZED)
SHEET NUMBER 44 OF 52

89° 45′ 00″ — R. 6 E. | R. 7 E. — 273 000m E — 89° 41′ 15″

42° 00′ 00″ — 4653 — 4652 — 4651 — 4650 — 4649 — 4648 — 4647 000mN — 41° 56′ 15″

T. 23 N.

Elkhorn Creek — Eagle Creek — Eagle Creek — Elkhorn Creek — Elkhorn Creek — Goose Creek

Hitt — South Elkhorn — Hazelhurst

OGLE COUNTY

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

35	36		35 LANARK SE 36 BROOKVILLE SW
43			43 MILLEDGEVILLE NE
51	52		51 MILLEDGEVILLE SE 52 HAZELHURST SW

INDEX TO ADJOINING 3.75 MAPS

HAZELHURST NW, (OVERSIZED) ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 44 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
CLINTON NW SE QUADRANGLE
SHEET NUMBER 45 OF 52

90°11'15" 90°07'30"

R. 3 E.

T. 23 N.

CLINTON COUNTY IOWA

MISSISSIPPI RIVER

WHITESIDE COUNTY

35

7452A 1076A 3646L 3076A

41°56'15"

41°52'30"

4645 4644 4643 4642 4641 4640000mN

734000mE 735 736 737 738

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

	37	38	37 CLINTON NW NE 38 THOMSON NW
		46	46 THOMSON SW

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CLINTON NW SE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 45 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
THOMSON SW QUADRANGLE
SHEET NUMBER 46 OF 52

90° 07′ 30″ — 90° 03′ 45″ — 41° 56′ 15″ — 41° 52′ 30″

R. 3 E. | R. 4 E.

739 000m E — 740 — 741 — 742 — 743

T. 23 N.

4646 — 4645 — 4644 — 4643 — 4642 — 4641 — 4640 000m N

WHITESIDE COUNTY

Ebner — Potters Marsh — POTTERS SLOUGH — Johnson Creek

35 — 36 — 31 — 32

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North American Datum of 1983 (NAD83), GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

37	38	39	37 CLINTON NW NE 38 THOMSON NW 39 THOMSON NE 45 CLINTON NW SE 47 THOMSON SE
45		47	

INDEX TO ADJOINING 3.75 MAPS

THOMSON SW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 46 OF 52

Soil map delineations extending beyond the dashed white quadrangle neatline are for reference only and are included on adjacent map sheets.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
THOMSON NE QUADRANGLE
SHEET NUMBER 47 OF 52

90° 03′ 45″ — 90° 00′ 00″ — 41° 56′ 15″ — 41° 52′ 30″

R. 4 E.

T. 23 N.

744 000m E — 745 — 746 — 747 — 748

4646 — 4645 — 4644 — 4643 — 4642 — 4641 — 4640 000m N

WHITESIDE COUNTY

Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 15. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5
MILES

500 0 500 1000 1500 2000 2500 3000 3500
FEET

0.5 0 0.5
KILOMETERS

38	39	40	38 THOMSON NW 39 THOMSON NE 40 FAIR HAVEN NW
46		48	46 THOMSON SW 48 FAIR HAVEN SW

INDEX TO ADJOINING 3.75 MAPS

THOMSON NE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 47 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
FAIR HAVEN SW QUADRANGLE
SHEET NUMBER 48 OF 52

90° 00′ 00″ — 89° 56′ 15″ — 41° 56′ 15″ — 41° 52′ 30″

252 000m E — 254 — 255 — 256

R. 4 E. | R. 5 E.

T. 23 N.

WHITESIDE COUNTY

4646 — 4645 — 4644 — 4643 — 4642 — 4641 000mN — 4640 000mN

35 — 36 — 31 — 32 — 33

Rock Creek — Little Rock Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 16. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

39	40	41	39 THOMSON NE 40 FAIR HAVEN NW 41 FAIR HAVEN NE 47 THOMSON SE 49 FAIR HAVEN SE
47		49	

INDEX TO ADJOINING 3.75 MAPS

FAIR HAVEN SW, ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 48 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
FAIR HAVEN SE QUADRANGLE
SHEET NUMBER 49 OF 52

89°56'15" 89°52'30"

R. 5 E.

257 000m E 258 259 260 261

41°56'15"

T. 23 N.

33 34 35 36

WHITESIDE COUNTY

4646 4645 4644 4643 4642 4641 4640 000m N

41°52'30"



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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

40	41	42
48		50

40 FAIR HAVEN NW
41 FAIR HAVEN NE
42 MILLEDGEVILLE NW
48 FAIR HAVEN SW
50 MILLEDGEVILLE SW

INDEX TO ADJOINING 3.75 MAPS

FAIR HAVEN SE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 49 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
MILLEDGEVILLE SW QUADRANGLE
SHEET NUMBER 50 OF 52

89°52′30″ 89°48′45″

R. 5 E. | R. 6 E.

262 000m E 263 264 265 266

41°56′15″ 41°52′30″

T. 23 N.

4646 4645 4644 4643 4642 4641 4640 000m N

WHITESIDE COUNTY

36 31 32 33

280C3 280C2 3451A 3107A 1451A 272A 61A 86B 86C2 51A 3076A 1107A 86A 416C2 412C2 410D3 68A 68A+ 675C2 675B 2402

Rock Creek Otter Creek

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

NORTH

QUARTER QUADRANGLE LOCATION

41	42	43
49		51

41 FAIR HAVEN NE
42 MILLEDGEVILLE NW
43 MILLEDGEVILLE NE
49 FAIR HAVEN SE
51 MILLEDGEVILLE SE

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MILLEDGEVILLE SW, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 50 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
MILLEDGEVILLE SE QUADRANGLE
SHEET NUMBER 51 OF 52

89° 48′ 45″ — 89° 45′ 00″ — 41° 56′ 15″ — 41° 52′ 30″

R. 6 E.

T. 23 N.

WHITESIDE COUNTY

33 34 35 36



SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

NORTH

QUARTER QUADRANGLE LOCATION

42	43	44	42 MILLEDGEVILLE NW 43 MILLEDGEVILLE NE 44 HAZELHURST NW
50		52	50 MILLEDGEVILLE SW 52 HAZELHURST SW

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MILLEDGEVILLE SE, ILLINOIS
3.75 MINUTE SERIES
SHEET NUMBER 51 OF 52

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UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CARROLL COUNTY, ILLINOIS
HAZELHURST SW QUADRANGLE (OVERSIZED)
SHEET NUMBER 52 OF 52

89° 45′ 00″ — R. 6. E. | R. 7 E. — 89° 41′ 15″

41° 56′ 15″ — T. 23 N. — 41° 52′ 30″

WHITESIDE COUNTY — OGLE COUNTY

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NORTH

QUARTER QUADRANGLE LOCATION

SCALE 1:12000

0.5 0 0.5 MILES

500 0 500 1000 1500 2000 2500 3000 3500 FEET

0.5 0 0.5 KILOMETERS

43	44		43 MILLEDGEVILLE NE 44 HAZELHURST NW
51			51 MILLEDGEVILLE SE

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HAZELHURST SW, (OVERSIZED) ILLINOIS

3.75 MINUTE SERIES
SHEET NUMBER 52 OF 52

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